



Supplemental Regulatory Capital Disclosure

For the Third Quarter Ended July 31, 2018

For further information, please contact:

TD Investor Relations

416-308-9030

www.td.com/investor

Gillian Manning – Head, Investor Relations (gillian.manning@td.com)
Anita Bruinsma – Senior Manager, Investor Relations (anita.bruinsma@td.com)

Introduction

The information contained in this package is designed to facilitate the readers' understanding of the capital requirements of TD Bank Group ("TD" or the "Bank"). This information should be used in conjunction with the Bank's third quarter 2018 Report to Shareholders, Earnings News Release, Supplemental Financial Information, and Investor Presentation, as well as the Bank's 2017 Annual Report. For Basel-related terms and acronyms used in this package, refer to the "Glossary – Basel" and "Acronyms" pages, respectively.

How the Bank Reports

The Bank prepares its Consolidated Financial Statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), the current generally accepted accounting principles (GAAP), and refers to results prepared in accordance with IFRS as "reported" results. Certain comparative amounts have been reclassified to conform with the presentation adopted in the current period.

Effective November 1, 2017, the Bank adopted IFRS 9, *Financial Instruments* (IFRS 9), which replaces the guidance in IAS 39, *Financial Instruments: Recognition and Measurement* (IAS 39). Accordingly, fiscal 2018 numbers are based on IFRS 9. The Bank did not restate prior periods which continue to be based on IAS 39. For further details, refer to Note 2 of the Bank's third quarter 2018 Interim Consolidated Financial Statements.

Basel III Reporting

The Office of the Superintendent of Financial Institutions Canada (OSFI) has implemented a phased-in approach to the Credit Valuation Adjustment (CVA) component included in credit risk-weighted assets (RWA). The CVA capital charge phase-in is based on a scalar approach whereby a CVA capital charge of 80% applies in 2018 for the Common Equity Tier 1 (CET1) calculation and will increase to 100% in 2019. A different scalar applies to the CET1, Tier 1, and Total Capital ratios. Therefore, each capital ratio has its own RWA measure. For fiscal 2017, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 72%, 77%, and 81%, respectively. For fiscal 2018, the corresponding scalars are 80%, 83%, and 86%, respectively. Effective in the second quarter of 2018, OSFI implemented a revised methodology for calculating the regulatory capital floor. The revised floor is based on the Basel II standardized approach, with the floor factor transitioned in over three quarters. The factor increases from 70% in the second quarter of 2018, to 72.5% in the third quarter, and 75% in the fourth quarter. Under the revised methodology, the Bank is no longer constrained by the capital floor. All three RWA measures are disclosed as part of the RWA disclosures on page 6, as well as the Capital Position disclosures on pages 1 to 2.

OSFI approved the Bank i) to use the Advanced Measurement Approach (AMA), and ii) to calculate the majority of the retail portfolio credit RWA in the U.S. Retail segment using the Advanced Internal Ratings Based (AIRB) approach.

Future Regulatory Capital Developments

In April 2017, OSFI issued the final guidelines on Phase 1 of the Pillar 3 Disclosure Requirements. This guideline clarifies OSFI's expectations regarding domestic implementation by federally regulated deposit-taking institutions of the Revised Pillar 3 Disclosure Requirements (Revised Basel Pillar 3 standard) issued by the Basel Committee on Banking Supervision (BCBS) in January 2015. The revised standard requires disclosure of fixed format tables and templates to provide comparability and consistency of capital and risk disclosures amongst banks with the focus on improving the transparency of the internal model-based approaches that banks use to calculate RWA. The guideline replaces OSFI's November 2007 Advisory on Pillar 3 Disclosure Requirements. Domestic Systemically Important Banks (D-SIBs) are expected to prospectively disclose the reporting requirements under the Revised Basel Pillar 3 standard by the fourth quarter of 2018.

Table of Contents

	Page		Page
Capital Position – Basel III	1 - 2	AIRB Credit Risk Exposures: Undrawn Commitments and EAD on	
Flow Statement for Regulatory Capital	3	Undrawn Commitments	24
Leverage Ratio	4	AIRB Credit Risk Exposures: Loss Experience	25
Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation	5	AIRB Credit Risk Exposures: Actual and Estimated Parameters	26
Risk-Weighted Assets	6	Exposures Covered By Credit Risk Mitigation	27
Consolidated Balance Sheet Cross-Referenced to Credit Risk Exposures	7	Derivatives – Notional	28 - 29
Gross Credit Risk Exposure	8 - 10	– Credit Exposure	30
Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured	11 - 15	On- and Off-Balance Sheet Loan Securitizations	31
Retail Advanced IRB Exposures – By Obligor Grade – Qualifying		Standardized Charges for Securitization Exposures in the Trading Book	32
Revolving Retail	16 - 17	Securitization Exposures in the Trading Book	33
Retail Advanced IRB Exposures – By Obligor Grade – Other Retail	18 - 19	Securitization Exposures in the Banking Book	34
Non-Retail Advanced IRB Exposures – By Obligor Grade – Corporate	20	Securitization and Resecuritization Exposures in the Banking Book	35
Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign	21	Third-Party Originated Assets Securitized by Bank Sponsored Conduits	36
Non-Retail Advanced IRB Exposures – By Obligor Grade – Bank	22	Glossary – Basel	37
Standardized Credit Risk Exposures	23	Acronyms	38

Capital Position – Basel III¹

(\$ millions)
As at

Common Equity Tier 1 Capital

Common shares plus related contributed surplus

Retained earnings

Accumulated other comprehensive income (loss)

Common Equity Tier 1 Capital before regulatory adjustments

Common Equity Tier 1 Capital regulatory adjustments

Goodwill (net of related tax liability)

Intangibles (net of related tax liability)

Deferred tax assets excluding those arising from temporary differences

Cash flow hedge reserve

Shortfall of provisions to expected losses³

Gains and losses due to changes in own credit risk on fair valued liabilities

Defined benefit pension fund net assets (net of related tax liability)

Investment in own shares

Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)

Total regulatory adjustments to Common Equity Tier 1 Capital

Common Equity Tier 1 Capital

Additional Tier 1 capital instruments

Directly issued qualifying Additional Tier 1 instruments plus stock surplus

Directly issued capital instruments subject to phase out from Additional Tier 1

Additional Tier 1 instruments issued by subsidiaries and held by third parties subject to phase out

Additional Tier 1 capital instruments before regulatory adjustments

Additional Tier 1 capital instruments regulatory adjustments

Investment in own Additional Tier 1 instruments

Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions

Total regulatory adjustments to Additional Tier 1 Capital

Additional Tier 1 Capital

Tier 1 Capital

Tier 2 capital instruments and provisions

Directly issued qualifying Tier 2 instruments plus related stock surplus

Directly issued capital instruments subject to phase out from Tier 2

Tier 2 instruments issued by subsidiaries and held by third parties subject to phase out

Collective allowance

Tier 2 Capital before regulatory adjustments

Tier 2 regulatory adjustments

Investments in own Tier 2 instruments

Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions

Total regulatory adjustments to Tier 2 Capital

Tier 2 Capital

Total Capital

Common Equity Tier 1 Capital RWA⁴

Tier 1 Capital RWA⁴

Total Capital RWA⁴

Line #	2018			2017		Cross Reference ²	OSFI Template
	Q3	Q2	Q1	Q4	Q3		
1	\$ 21,123	\$ 21,287	\$ 21,228	\$ 20,967	\$ 21,095	A1+A2+B	1
2	44,223	43,363	41,744	40,489	39,473	C	2
3	6,498	5,923	4,472	8,006	6,564	D	3
4	71,844	70,573	67,444	69,462	67,132		6
5	(19,079)	(18,856)	(18,136)	(18,820)	(18,269)	E1+E2-E3	8
6	(2,254)	(2,274)	(2,242)	(2,310)	(2,261)	F1-F2	9
7	(248)	(121)	(122)	(113)	(120)	G	10
8	2,228	2,160	1,731	506	278	H	11
9	(967)	(734)	(679)	(805)	(747)	I	12
10	(109)	(118)	(68)	(73)	(103)	J	14
11	(65)	(13)	(13)	(13)	(11)	K	15
12	—	—	(21)	—	(157)		16
13	(1,254)	(1,132)	(1,085)	(1,206)	(767)	L1+L2+L3	19
14	(21,748)	(21,088)	(20,635)	(22,834)	(22,157)		28
15	50,096	49,485	46,809	46,628	44,975		29
16	4,600	4,599	4,246	4,247	4,247	M+N+O	30/31
17	2,456	2,455	2,455	3,229	3,070	P1+P2+P3	33
18	245	245	245	—	306	Q	34/35
19	7,301	7,299	6,946	7,476	7,623		36
20	—	—	—	(1)	—		37
21	(350)	(350)	(352)	(352)	(352)	R+S	40
22	(350)	(350)	(352)	(353)	(352)		43
23	6,951	6,949	6,594	7,123	7,271		44
24	57,047	56,434	53,403	53,751	52,246		45
25	7,184	7,127	7,028	7,156	7,082	T	46
26	199	848	836	2,648	2,641	U	47
27	—	—	—	—	279		48/49
28	1,665	1,721	1,662	1,668	1,571	V	50
29	9,048	9,696	9,526	11,472	11,573		51
30	(2)	—	—	(25)	(19)		52
31	(160)	(160)	(160)	(160)	(170)	W	55
32	(162)	(160)	(160)	(185)	(189)		57
33	8,886	9,536	9,366	11,287	11,384		58
34	65,933	65,970	62,769	65,038	63,630		59
35	428,943	417,819	441,273	435,750	408,803		60a
36	429,083	417,951	441,273	435,750	408,803		60b
37	\$ 429,222	\$ 418,082	\$ 441,273	\$ 435,750	\$ 408,803		60c

¹ Capital position has been calculated using the "all-in" basis.

² Cross referenced to the Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation table on page 5.

³ Effective November 1, 2017, amounts are presented in accordance with IFRS 9. Prior periods have not been restated and are based on IAS 39. Refer to Note 2 of the Bank's second quarter 2018 Interim Consolidated Financial Statements.

⁴ Each capital ratio has its own RWA measure due to the OSFI prescribed scalar for inclusion of the CVA. For fiscal 2017, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 72%, 77%, and 81%, respectively. For fiscal 2018, the corresponding scalars are 80%, 83%, and 86%, respectively. Prior to the second quarter of 2018, as the Bank was constrained by the Basel I regulatory floor, the RWA as it relates to the regulatory floor was calculated based on the Basel I risk weights which were the same for all capital ratios.

Capital Position – Basel III (Continued)

(\$ millions, except as noted)

As at

Capital Ratios¹

Common Equity Tier 1 Capital (as percentage of CET1 Capital RWA)	38	11.7 %	11.8 %	10.6 %	10.7 %	11.0 %	61
Tier 1 (as percentage of Tier 1 Capital RWA)	39	13.3	13.5	12.1	12.3	12.8	62
Total Capital (as percentage of Total Capital RWA)	40	15.4	15.8	14.2	14.9	15.6	63
Buffer requirement (minimum CET1 requirement plus capital conservation buffer plus global systemically important banks (G-SIBs) buffer plus domestic systemically important banks (D-SIBs) buffer requirement expressed as percentage of RWA) ^{2,3}	41	8.0	8.0	8.0	8.0	8.0	64
of which: capital conservation buffer requirement	42	2.5	2.5	2.5	2.5	2.5	65
of which: countercyclical buffer requirement ⁴	43	—	—	—	—	—	66
of which: D-SIB buffer requirement ⁵	44	1.0	1.0	1.0	1.0	1.0	67a
Common Equity Tier 1 available to meet buffers (as percentage of RWA)	45	11.7	11.8	10.6	10.7	11.0	68

OSFI all-in target (minimum plus conservation buffer plus D-SIB surcharge (if applicable))⁶

Common Equity Tier 1 all-in target ratio	46	8.0	8.0	8.0	8.0	8.0	69
Tier 1 all-in target ratio	47	9.5	9.5	9.5	9.5	9.5	70
Total Capital all-in target ratio	48	11.5	11.5	11.5	11.5	11.5	71

Amounts below the thresholds for deduction (before risk weighting)

Non-significant investments in the capital of other financials	49	\$ 3,075	\$ 4,129	\$ 3,318	\$ 2,624	\$ 1,501	72
Significant investments in the common stock of financials	50	5,135	5,061	4,789	4,783	4,574	73
Mortgage servicing rights	51	37	34	31	31	27	74
Deferred tax assets arising from temporary differences (net of related tax liability)	52	1,029	1,158	1,100	909	1,073	75

Applicable caps on the inclusion of allowances in Tier 2

Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach (prior to application of cap)	53	1,665	1,721	1,662	1,668	1,571	76
Cap on inclusion of allowances in Tier 2 under standardized approach	54	2,020	2,041	1,941	2,029	1,894	77

Capital instruments subject to phase-out arrangements (only applicable between January 1, 2013 to January 1, 2022)

Current cap on Additional Tier 1 instruments subject to phase out arrangements	55	2,700	2,700	2,700	3,376	3,376	82
Amounts excluded from Additional Tier 1 due to cap (excess over cap after redemptions and maturities)	56	284	541	535	—	10	83
Current cap on Tier 2 instruments subject to phase out arrangements	57	3,505	3,505	3,505	4,381	4,381	84
Amounts excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	58	—	—	—	—	—	85

Capital Ratios – transitional basis⁷

Risk-weighted assets	59	\$ n/a ⁸	\$ n/a	\$ n/a	\$ 443,186	\$ 416,529	
Common Equity Tier 1 Capital	60	n/a	n/a	n/a	51,294	49,458	
Tier 1 Capital	61	n/a	n/a	n/a	54,523	52,994	
Total Capital	62	n/a	n/a	n/a	65,646	64,265	
Common Equity Tier 1 (as percentage of RWA)	63	n/a %	n/a %	n/a %	11.6 %	11.9 %	
Tier 1 Capital (as percentage of RWA)	64	n/a	n/a	n/a	12.3	12.7	
Total Capital (as percentage of RWA)	65	n/a	n/a	n/a	14.8	15.4	

Capital Ratios for significant bank subsidiaries

TD Bank, National Association (TD Bank, N.A.)⁹

Common Equity Tier 1 Capital	66	14.7	14.9	14.8	14.8	14.4	
Tier 1 Capital	67	14.7	14.9	14.8	14.8	14.5	
Total Capital	68	15.6	15.7	15.6	15.7	15.5	

TD Mortgage Corporation

Common Equity Tier 1 Capital	69	39.9	37.2	35.9	35.9	35.5	
Tier 1 Capital	70	39.9	37.2	35.9	35.9	35.5	
Total Capital	71	40.7	38.1	36.7	36.9	36.6	

¹ Capital position has been calculated using the "all-in" basis.

² The minimum CET1 requirement prior to the buffers is 4.5%.

³ The Financial Stability Board, in consultation with BCBS and national authorities, has identified the 2017 list of G-SIBs, using 2016 fiscal year-end data. The Bank was not identified as a G-SIB.

⁴ The countercyclical buffer surcharge is in effect.

⁵ Common equity capital D-SIB surcharge is in effect.

⁶ Reflects Pillar 1 targets and does not include Pillar 2 domestic stability buffer of 1.5%.

⁷ The "transitional" basis of regulatory reporting allows for certain adjustments to CET1, the largest of which being goodwill, intangible assets and the threshold deductions, to be phased-in over a period of five years starting in 2014. Effective the first quarter of 2018, the transitional period has ended and thus there is no longer a transitional ratio.

⁸ Not applicable.

⁹ On a stand-alone basis, TD Bank, N.A. reports regulatory capital to the Office of the Comptroller of the Currency (OCC) on calendar quarter ends.

Flow Statement for Regulatory Capital¹

(\$ millions)

Common Equity Tier 1

Balance at beginning of period
New capital issues
Redeemed capital ²
Gross dividends (deductions)
Shares issued in lieu of dividends (add back)
Profit attributable to shareholders of the parent company ³
Removal of own credit spread (net of tax)
Movements in other comprehensive income
Currency translation differences
Available-for-sale investments
Financial assets at fair value through other comprehensive income
Other
Goodwill and other intangible assets (deduction, net of related tax liability)
Other, including regulatory adjustments and transitional arrangements
Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)
Prudential valuation adjustments
Other
Balance at end of period

Additional Tier 1 Capital

Balance at beginning of period
New additional Tier 1 eligible capital issues
Redeemed capital
Other, including regulatory adjustments and transitional arrangements
Balance at end of period

Total Tier 1 Capital

Tier 2 Capital

Balance at beginning of period
New Tier 2 eligible capital issues
Redeemed capital
Amortization adjustments
Allowable collective allowance
Other, including regulatory adjustments and transitional arrangements
Balance at end of period
Total Regulatory Capital

Line #	2018			2017	
	Q3	Q2	Q1	Q4	Q3
1	\$ 49,485	\$ 46,809	\$ 46,628	\$ 44,975	\$ 45,417
2	28	24	72	27	18
3	(1,457)	(44)	—	(517)	—
4	(1,281)	(1,291)	(1,154)	(1,155)	(1,155)
5	89	92	91	82	85
6	3,087	2,898	2,335	2,677	2,740
7	9	(50)	5	30	39
8	656	2,028	(2,245)	1,638	(4,428)
9	n/a	n/a	n/a	36	(94)
10	(11)	(156)	34	n/a	n/a
11	(2)	8	(98)	(4)	(1)
12	(203)	(752)	752	(600)	1,657
13	(127)	1	(9)	7	24
14	—	—	—	—	—
15	(177)	(82)	398	(568)	673
16	50,096	49,485	46,809	46,628	44,975
17	6,949	6,594	7,123	7,271	6,920
18	—	350	—	—	350
19	—	—	—	(600)	—
20	2	5	(529)	452	1
21	6,951	6,949	6,594	7,123	7,271
22	57,047	56,434	53,403	53,751	52,246
23	9,536	9,366	11,287	11,384	10,205
24	—	—	—	—	1,500
25	(650)	—	(1,800)	(270)	—
26	—	—	—	—	—
27	(56)	59	(6)	97	(109)
28	56	111	(115)	76	(212)
29	8,886	9,536	9,366	11,287	11,384
30	\$ 65,933	\$ 65,970	\$ 62,769	\$ 65,038	\$ 63,630

¹ The statement is based on the applicable regulatory rules in force at the period end.

² Represents impact of shares repurchased for cancellation.

³ Profit attributable to shareholders of the parent company reconciles to the income statement.

Leverage Ratio¹

(\$ millions, except as noted)
As at

Summary comparison of accounting assets vs. leverage ratio exposure measure

Total consolidated assets as per published financial statements
Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation
Adjustments for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure
Adjustments for derivative financial instruments
Adjustment for securities financing transactions (SFT)
Adjustment for off-balance sheet items (credit equivalent amounts)
Other adjustments

Leverage Ratio Exposure

Leverage Ratio Common Disclosure Template

On-balance sheet exposures

On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral)
Less: Asset amounts deducted in determining Tier 1 Capital

Total on-balance sheet exposures (excluding derivatives and SFTs)

Derivative exposures

Replacement cost associated with all derivative transactions (such as net of eligible cash variation margin)
Add-on amounts for potential future exposure (PFE) associated with all derivative transactions
Gross up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework
Deductions of receivables assets for cash variation margin provided in derivative transactions
Exempted central counterparty (CCP)-leg of client cleared trade exposures
Adjusted effective notional amount of written credit derivatives
Adjusted effective notional offsets and add-on deductions for written credit derivatives

Total derivative exposures

Securities financing transaction exposures

Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions
Netted amounts of cash payables and cash receivables of gross SFT assets
Counterparty credit risk (CCR) exposure for SFTs
Agent transaction exposures

Total securities financing transaction exposures

Other off-balance sheet exposures

Off-balance sheet exposure at gross notional amount
Adjustments for conversion to credit equivalent amounts
Off-balance sheet items

Capital and Total Exposures – Transitional basis

Tier 1 Capital
Total Exposures (sum of lines 11, 19, 24, and 27)

Leverage Ratio – Transitional basis (line 28 divided by line 29)

"All-in" basis (required by OSFI)

Tier 1 Capital – "All-in" basis (line 24 on page 1)
Regulatory adjustments

Total Exposures (sum of lines 11, 19, 24 and 27) – All-in basis

Leverage Ratio – "All-in" basis (line 31 divided by line 33)

Line #	2018			2017		OSFI Template
	Q3	Q2	Q1	Q4	Q3	
1	\$ 1,292,504	\$ 1,283,836	\$ 1,261,316	\$ 1,278,995	\$ 1,202,381	1
2	(5,981)	(5,497)	(5,438)	(5,328)	(4,518)	2
3	–	–	–	–	–	3
4	594	(6,012)	(19,902)	(11,153)	(21,720)	4
5	(16,893)	(8,397)	(3,668)	(3,559)	1,993	5
6	137,850	137,238	130,589	130,829	128,124	6
7	(22,264)	(21,728)	(21,387)	(22,980)	(22,307)	7
8	\$ 1,385,810	\$ 1,379,440	\$ 1,341,510	\$ 1,366,804	\$ 1,283,953	8
9	\$ 1,109,661	\$ 1,081,918	\$ 1,070,252	\$ 1,082,418	\$ 1,013,739	1
10	(21,989)	(21,319)	(20,918)	(22,355)	(21,675)	2
11	1,087,672	1,060,599	1,049,334	1,060,063	992,064	3
12	13,409	14,524	13,242	12,074	11,784	4
13	39,885	39,472	35,850	38,212	35,865	5
14	–	–	–	–	–	6
15	(5,663)	(5,383)	(9,003)	(5,852)	(6,998)	7
16	–	–	–	–	–	8
17	1,874	903	840	1,694	1,020	9
18	(1,344)	(430)	(274)	(1,085)	(299)	10
19	48,161	49,086	40,655	45,043	41,372	11
20	129,019	140,914	124,600	134,429	120,400	12
21	(19,383)	(11,037)	(5,837)	(4,952)	–	13
22	2,491	2,640	2,169	1,392	1,993	14
23	–	–	–	–	–	15
24	112,127	132,517	120,932	130,869	122,393	16
25	529,419	528,197	506,622	504,441	493,474	17
26	(391,569)	(390,959)	(376,033)	(373,612)	(365,350)	18
27	137,850	137,238	130,589	130,829	128,124	19
28	n/a	n/a	n/a	54,523	52,994	
29	\$ n/a	\$ n/a	\$ n/a	\$ 1,366,804	\$ 1,283,953	
30	n/a %	n/a %	n/a %	4.0 %	4.1 %	
31	\$ 57,047	\$ 56,434	\$ 53,403	\$ 53,751	\$ 52,246	20
32	n/a	n/a	n/a	(23,114)	(22,406)	
33	\$ 1,385,810	\$ 1,379,440	\$ 1,341,510	\$ 1,366,045	\$ 1,283,222	21
34	4.1 %	4.1 %	4.0 %	3.9 %	4.1 %	22

¹ Prior to the first quarter of 2018, lines 1 to 27 were measured on the transitional basis. Effective the first quarter of 2018, the transitional period has ended and thus all items are measured on the 'all-in' basis and there is no longer a transitional ratio.

Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation

(\$ millions)
As at

Cash and due from banks
Interest-bearing deposits with banks
Trading loans, securities, and other
Non-trading financial assets at fair value through profit or loss
Derivatives
Financial assets designated at fair value through profit or loss
Financial assets at fair value through other comprehensive income
Debt securities at amortized cost, net of allowance for credit losses
Securities purchased under reverse repurchase agreements
Loans
Allowance for loan losses
Eligible allowance reflected in Tier 2 regulatory capital
Shortfall of allowance to expected loss
Allowances not reflected in regulatory capital
Other
Investment in TD Ameritrade
Significant investments exceeding regulatory thresholds
Significant investments not exceeding regulatory thresholds
Imputed goodwill
Goodwill
Other intangibles
Other intangibles (Mortgage Servicing Rights)
Deferred tax assets
Deferred tax assets (DTA) excluding those arising from temporary differences
DTA's (net of associated deferred tax liabilities (DTL)) realizable through net operating loss (NOL) carryback
DTA's (net of associated DTL's) arising from temporary differences but not realizable through NOL carryback
DTA's (net of associated DTL's) arising from temporary differences but not realizable through NOL carryback exceeding regulatory thresholds
Other DTA/DTL adjustments ⁵
Significant investments in financials (excluding TD Ameritrade)
Significant investments exceeding regulatory thresholds
Significant investments in Additional Tier 1 Capital
Significant investments not exceeding regulatory thresholds
Defined pension benefits
Other Assets
TOTAL ASSETS
LIABILITIES AND EQUITY⁶
Trading deposits
Derivatives
Securitization liabilities at fair value
Deposits
Other
Deferred tax liabilities
Goodwill
Intangible assets (excluding mortgage servicing rights)
Other deferred tax liabilities (Cash flow hedges and other DTL's)
Other DTA/DTL adjustments ⁵
Gains and losses due to changes in own credit risk on fair value liabilities
Other liabilities
Subordinated notes and debentures
Directly issued qualifying Tier 2 instruments
Directly issued capital instruments subject to phase out from Tier 2
Capital instruments not allowed for regulatory capital
Liabilities
Common Shares
Preferred Shares
Directly issued qualifying Additional Tier 1 instruments
Directly issued capital instruments subject to phase out from Additional Tier 1
Preferred shares not allowed for regulatory capital
Treasury Shares – Common
Treasury Shares – Preferred
Treasury Shares – non-viability contingent capital (NVCC) Preferred Shares
Treasury Shares – non-NVCC Preferred Shares
Contributed Surplus
Contributed surplus – Common Shares
Contributed surplus – Preferred Shares
Retained Earnings
Accumulated other comprehensive income (AOCI)
Cash flow hedges requiring derecognition
Net AOCI included as capital
Non-controlling interests in subsidiaries
Portion allowed for regulatory capital (directly issued) subject to phase out – additional Tier 1
Portion allowed for regulatory capital (issued by subsidiaries and held by third parties) subject to phase out – additional Tier 1
Portion not allowed for regulatory capital subject to phase out
TOTAL LIABILITIES AND EQUITY

Line #	2018 Q3		Cross Reference ³
	Balance Sheet ¹	Under Regulatory scope of consolidation ²	
1	\$ 5,541	\$ 5,541	
2	34,578	34,448	
3	124,061	124,061	
4	3,865	3,403	
5	47,567	47,567	
6	3,246	1,225	
7	130,152	128,141	
8	99,839	99,389	
9	129,019	129,019	
10	638,763	638,763	
11	(3,535)	(3,535)	
12		(1,665)	V
13		(967)	I
14		(903)	
15	79,408	77,431	
16		1,018	L1
17		4,343	
18		2,814	E1
19		16,360	E2
20		2,446	F1
21		37	
22		248	G
23		1,029	
24		1,013	
25		–	
26		332	
27		14	L2
28		–	S
29		60	
30		65	K
31		47,652	
32	1,292,504	1,285,453	
33	107,599	107,599	
34	42,966	42,966	
35	12,018	12,018	
36	838,568	838,568	
37	206,643	199,592	
38		95	E3
39		192	F2
40		(441)	
41		332	
42		109	J
43		199,305	
44	7,023	7,023	
45		7,184	T
46		199	U
47		(360)	
48	1,214,817	1,207,766	
49	21,099	21,099	A1
50	4,850	4,850	
51		4,600	M
52		1,359	P1
53		(1,109)	
54	(168)	(168)	A2
55	(3)	(3)	
56		(3)	N
57		–	
58	195	195	
59		192	B
60		3	O
61	44,223	44,223	C
62	6,498	6,498	D
63		(2,228)	H
64		8,726	
65	993	993	
66		397	P2
67		245	Q
68		351	
69	\$ 1,292,504	\$ 1,285,453	

¹ As per Balance Sheet on page 12 in the Supplemental Financial Information Package.

² Legal entities excluded from the regulatory scope of consolidation included the following insurance subsidiaries: Meloche Monnex Inc. (consolidated), TD Life Insurance Company and TD Reinsurance (Barbados) Inc. which have total assets included in the consolidated Bank of \$7.1 billion and total equity of \$1.6 billion, of which \$222 million is deducted from CET1, \$350 million is deducted from additional Tier 1 and \$160 million is deducted from Tier 2 Capital. Cross referenced (L3, R, W) respectively, to the Capital Position – Basel III on page 1.

³ Cross referenced to the current period on the Capital Position – Basel III on pages 1 and 2.

⁴ This adjustment is related to deferred tax assets/liabilities netted for financial accounting purposes.

⁵ Included in current cap on additional Tier 1 instruments is \$1.7 billion related to TD Capital Trust IV (no longer consolidated as the Bank is not the primary beneficiary of the trust). The allowed for regulatory capital is \$700 million (P3 – cross referenced to Capital Position – Basel III on page 1).

Risk-Weighted Assets¹

As at	LINE #	2018 Q3				2018 Q2				2018 Q1			
		Risk-weighted assets				Risk-weighted assets				Risk-weighted assets			
		Gross exposures	Standardized Approach	Advanced Approach	Total	Gross exposures	Standardized Approach	Advanced Approach	Total	Gross exposures	Standardized Approach	Advanced Approach	Total
Credit Risk													
Retail													
Residential secured	1	\$ 367,143	\$ 1,567	\$ 29,227	\$ 30,794	\$ 358,299	\$ 1,430	\$ 28,333	\$ 29,763	\$ 353,180	\$ 1,385	\$ 27,602	\$ 28,987
Qualifying revolving retail	2	109,852	—	28,734	28,734	91,883	—	20,190	20,190	92,678	—	19,706	19,706
Other retail	3	91,900	9,273	34,390	43,663	96,072	13,886	33,484	47,370	94,396	13,972	31,136	45,108
Non-retail ²													
Corporate	4	475,048	117,392	61,313	178,705	463,767	114,905	59,821	174,726	433,834	108,980	55,788	164,768
Sovereign	5	234,533	7,877	554	8,431	238,397	7,583	506	8,089	243,983	6,988	539	7,527
Bank	6	117,255	3,472	5,361	8,833	116,188	3,513	5,693	9,206	121,480	3,460	5,226	8,686
Securitization exposures	7	82,564	4,026	9,197	13,223	76,023	3,534	10,111	13,645	72,145	2,981	11,064	14,045
Equity exposures	8	2,918	—	1,103	1,103	2,815	—	951	951	2,740	—	948	948
Exposures subject to standardized or IRB approaches	9	1,481,213	143,607	169,879	313,486	1,443,444	144,851	159,089	303,940	1,414,436	137,766	152,009	289,775
Adjustment to IRB RWA for scaling factor	10				9,971				9,249				8,764
Other assets not included in standardized or IRB approaches ²	11	171,569	n/a	n/a	39,566	152,093	n/a	n/a	38,990	151,457	n/a	n/a	37,061
Total credit risk	12	\$ 1,652,782			\$ 363,023	\$ 1,595,537			\$ 352,179	\$ 1,565,893			\$ 335,600
Market Risk	13	n/a	163	14,507	14,670	n/a	444	14,804	15,248	n/a	106	11,197	11,303
Operational Risk	14	n/a	4,090	47,160	51,250	n/a	3,827	46,565	50,392	n/a	3,795	45,621	49,416
Regulatory Floor	15	n/a			—	n/a			—	n/a			44,954
Total Common Equity Tier 1 Capital risk-weighted assets ³	16				428,943				417,819				441,273
Tier 1 Capital risk-weighted assets ³	17				429,083				417,951				441,273
Total Capital risk-weighted assets ³	18			\$	429,222			\$	418,082			\$	441,273

		2017 Q4				2017 Q3			
		Risk-weighted assets				Risk-weighted assets			
		Gross exposures	Standardized Approach	Advanced Approach	Total	Gross exposures	Standardized Approach	Advanced Approach	Total
Credit Risk									
Retail									
Residential secured	19	\$ 355,611	\$ 2,507	\$ 27,993	\$ 30,500	\$ 344,381	\$ 913	\$ 27,783	\$ 28,696
Qualifying revolving retail	20	93,527	—	19,432	19,432	93,504	—	19,230	19,230
Other retail	21	94,577	14,163	31,137	45,300	91,554	13,921	29,860	43,781
Non-retail ²									
Corporate	22	431,488	114,000	54,119	168,119	405,667	107,823	53,141	160,964
Sovereign	23	249,514	7,101	517	7,618	233,178	4,915	551	5,466
Bank	24	112,376	3,639	4,636	8,275	105,902	3,365	4,370	7,735
Securitization exposures	25	73,553	2,941	11,501	14,442	67,411	2,696	11,266	13,962
Equity exposures	26	2,696	—	805	805	2,617	—	888	888
Exposures subject to standardized or IRB approaches	27	1,413,342	144,351	150,140	294,491	1,344,214	133,633	147,089	280,722
Adjustment to IRB RWA for scaling factor	28				8,615				8,422
Other assets not included in standardized or IRB approaches ²	29	146,936	n/a	n/a	36,687	142,855	n/a	n/a	36,945
Total credit risk	30	\$ 1,560,278		\$ 339,793	\$ 339,793	\$ 1,487,069		\$ 326,089	\$ 326,089
Market Risk	31	n/a	1,049	12,971	14,020	n/a	552	13,290	13,842
Operational Risk	32	n/a	3,643	44,749	48,392	n/a	3,487	43,840	47,327
Regulatory Floor	33	n/a			33,545	n/a			21,545
Total Common Equity Tier 1 Capital risk-weighted assets ³	34				435,750				408,803
Tier 1 Capital risk-weighted assets ³	35				435,750				408,803
Total Capital risk-weighted assets ³	36			\$ 435,750	\$ 435,750			\$ 408,803	\$ 408,803

¹ Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

² Non-retail exposures do not include OSFI "deemed" Qualifying Central Counterparty (QCCP) exposures; as such exposures are included in "Other assets not included in standardized or Internal Ratings Based (IRB) approaches", in accordance with the Basel III regulatory framework.

³ Each capital ratio has its own RWA measure due to the OSFI-prescribed scalar for inclusion of the CVA. For fiscal 2018, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 80%, 83%, and 86%, respectively. For fiscal 2017, the corresponding scalars are 72%, 77%, and 81% respectively. Prior to the second quarter of 2018, as the Bank was constrained by the Basel I regulatory floor, the RWA as it relates to the regulatory floor was calculated based on the Basel I risk weights which were the same for all capital ratios.

Consolidated Balance Sheet Cross-Referenced to Credit Risk Exposures

(\$ millions)
As at

LINE #		2018 Q3									
		Credit risk exposures					Other exposures				
		Drawn		Other exposures			Subject to market risk capital		All other ¹		Total
		Non-retail	Retail	Securitization	Repo-style transactions	Derivatives					
Cash and due from banks	1	\$ 1,723	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 3,818	\$ 5,541		
Interest-bearing deposits with banks	2	33,561	—	—	—	—	291	726	34,578		
Trading loans, securities, and other	3	—	—	—	—	—	121,368	2,693	124,061		
Non-trading financial assets at fair value through profit or loss	4	—	116	2,904	—	—	—	845	3,865		
Derivatives	5	—	—	—	—	47,567	—	—	47,567		
Financial assets designated at fair value through profit or loss	6	1,226	—	—	—	—	—	2,020	3,246		
Financial assets at fair value through other comprehensive income	7	102,153	—	23,652	—	—	—	4,347	130,152		
Debt securities at amortized cost, net of allowance for credit losses	8	63,739	—	35,446	—	—	—	654	99,839		
Securities purchased under reverse repurchase agreements	9	—	—	—	129,019	—	—	—	129,019		
Residential mortgages ²	10	71,521	150,555	—	—	—	—	(299)	221,777		
Consumer instalment and other personal ²	11	14,754	150,593	—	—	—	—	2,390	167,737		
Credit card	12	—	30,817	—	—	—	—	3,847	34,664		
Business and government	13	194,568	12,479	8,267	—	—	—	(729)	214,585		
Allowance for loan losses ³	14	(49)	(94)	—	—	—	—	(3,392)	(3,535)		
Customers' liability under acceptances	15	15,090	—	—	—	—	—	—	15,090		
Investment in TD Ameritrade	16	—	—	—	—	—	—	8,175	8,175		
Goodwill	17	—	—	—	—	—	—	16,360	16,360		
Other intangibles	18	—	—	—	—	—	—	2,483	2,483		
Land, buildings, equipment, and other depreciable assets	19	—	—	—	—	—	—	5,212	5,212		
Deferred tax assets	20	—	—	—	—	—	—	2,724	2,724		
Amounts receivable from brokers, dealers and clients	21	1,104	—	—	—	—	—	13,218	14,322		
Other assets	22	4,088	48	428	—	—	—	10,478	15,042		
Total	23	\$ 503,478	\$ 344,514	\$ 70,697	\$ 129,019	\$ 47,567	\$ 121,659	\$ 75,570	\$ 1,292,504		

¹ Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to market risks or standardized/AIRB credit risk.

² Includes Canada Mortgage and Housing Corporation (CMHC) insured exposures classified as sovereign exposures under Basel III and therefore included in the non-retail category.

³ Allowances related to exposures under standardized methodology are included under non-retail or retail.

Gross Credit Risk Exposure¹

(\$ millions) As at		LINE #	2018 Q3						2018 Q2					
			Drawn	Undrawn ²	Repo-style transactions	OTC ³ derivatives	Other off-balance sheet	Total	Drawn	Undrawn ²	Repo-style transactions	OTC derivatives	Other off-balance sheet	Total
By Counterparty Type														
Retail														
Residential secured		1	\$ 315,828	\$ 51,315	\$ –	\$ –	\$ –	\$ 367,143	\$ 308,413	\$ 49,886	\$ –	\$ –	\$ –	\$ 358,299
Qualifying revolving retail		2	29,884	79,968	–	–	–	109,852	23,637	68,246	–	–	–	91,883
Other retail		3	85,209	6,648	–	–	43	91,900	89,553	6,476	–	–	43	96,072
		4	430,921	137,931	–	–	43	568,895	421,603	124,608	–	–	43	546,254
Non-retail														
Corporate		5	201,554	80,248	166,020	11,040	16,186	475,048	200,108	76,987	159,375	11,514	15,783	463,767
Sovereign		6	187,923	1,422	28,719	14,698	1,771	234,533	190,424	1,456	29,721	15,100	1,696	238,397
Bank		7	27,737	3,253	64,610	18,210	3,445	117,255	26,912	3,006	62,912	19,720	3,638	116,188
		8	417,214	84,923	259,349	43,948	21,402	826,836	417,444	81,449	252,008	46,334	21,117	818,352
Total		9	\$ 848,135	\$ 222,854	\$ 259,349	\$ 43,948	\$ 21,445	\$ 1,395,731	\$ 839,047	\$ 206,057	\$ 252,008	\$ 46,334	\$ 21,160	\$ 1,364,606
By Country of Risk														
Canada		10	\$ 464,056	\$ 126,098	\$ 102,418	\$ 12,540	\$ 9,244	\$ 714,356	\$ 461,084	\$ 127,685	\$ 91,852	\$ 13,233	\$ 9,038	\$ 702,892
United States		11	321,709	93,217	80,462	14,148	11,278	520,814	315,556	74,958	81,751	13,520	11,136	496,921
Other International														
Europe		12	42,928	2,900	60,758	14,082	741	121,409	42,937	2,804	59,444	15,879	619	121,683
Other		13	19,442	639	15,711	3,178	182	39,152	19,470	610	18,961	3,702	367	43,110
		14	62,370	3,539	76,469	17,260	923	160,561	62,407	3,414	78,405	19,581	986	164,793
Total		15	\$ 848,135	\$ 222,854	\$ 259,349	\$ 43,948	\$ 21,445	\$ 1,395,731	\$ 839,047	\$ 206,057	\$ 252,008	\$ 46,334	\$ 21,160	\$ 1,364,606
By Residual Contractual Maturity														
Within 1 year		16	\$ 276,203	\$ 155,494	\$ 259,349	\$ 19,808	\$ 10,059	\$ 720,913	\$ 271,086	\$ 140,912	\$ 252,008	\$ 22,106	\$ 9,758	\$ 695,870
Over 1 year to 5 years		17	398,881	64,869	–	16,996	10,463	491,209	394,728	62,814	–	16,823	10,508	484,873
Over 5 years		18	173,051	2,491	–	7,144	923	183,609	173,233	2,331	–	7,405	894	183,863
Total		19	\$ 848,135	\$ 222,854	\$ 259,349	\$ 43,948	\$ 21,445	\$ 1,395,731	\$ 839,047	\$ 206,057	\$ 252,008	\$ 46,334	\$ 21,160	\$ 1,364,606
Non-Retail Exposures by Industry Sector														
Real estate														
Residential		20	\$ 24,487	\$ 2,668	\$ 1	\$ 29	\$ 1,548	\$ 28,733	\$ 23,833	\$ 2,648	\$ 1	\$ 29	\$ 1,556	\$ 28,067
Non-residential		21	36,888	4,823	16	221	372	42,320	36,437	4,967	13	227	390	42,034
Total real-estate		22	61,375	7,491	17	250	1,920	71,053	60,270	7,615	14	256	1,946	70,101
Agriculture		23	6,710	342	3	15	21	7,091	6,584	226	7	12	23	6,852
Automotive		24	11,360	5,353	2	661	90	17,466	11,212	5,928	13	689	89	17,931
Financial		25	38,293	11,624	217,480	23,503	1,537	292,437	38,649	11,366	210,795	25,576	1,514	287,900
Food, beverage, and tobacco		26	5,653	3,283	–	336	523	9,795	5,239	3,099	–	367	491	9,196
Forestry		27	1,232	798	–	8	49	2,087	1,252	843	–	7	43	2,145
Government, public sector entities, and education		28	201,063	3,653	29,279	15,588	5,077	254,660	203,326	3,485	30,324	16,045	4,978	258,158
Health and social services		29	17,439	1,570	316	58	1,979	21,362	17,417	1,232	327	60	1,902	20,938
Industrial construction and trade contractors		30	4,052	1,498	44	5	778	6,377	4,032	1,395	58	5	762	6,252
Metals and mining		31	3,865	3,248	98	313	1,003	8,527	3,653	3,419	71	272	951	8,366
Pipelines, oil, and gas		32	6,693	11,368	27	1,231	1,662	20,981	6,551	11,057	85	1,085	1,760	20,538
Power and utilities		33	5,725	7,401	24	289	3,493	16,932	4,766	7,203	22	266	3,538	15,795
Professional and other services		34	14,720	5,237	147	95	822	21,021	14,366	4,735	154	82	772	20,109
Retail sector		35	6,142	2,962	307	35	232	9,678	6,128	2,205	412	43	242	9,030
Sundry manufacturing and wholesale		36	9,749	6,481	14	294	603	17,141	9,593	6,642	44	345	619	17,243
Telecommunications, cable, and media		37	6,776	8,290	–	658	425	16,149	8,033	6,947	–	618	294	15,892
Transportation		38	11,467	2,073	64	331	1,017	14,952	11,749	2,083	41	284	1,066	15,223
Other		39	4,900	2,251	11,527	278	171	19,127	4,624	1,969	9,641	322	127	16,683
Total		40	\$ 417,214	\$ 84,923	\$ 259,349	\$ 43,948	\$ 21,402	\$ 826,836	\$ 417,444	\$ 81,449	\$ 252,008	\$ 46,334	\$ 21,117	\$ 818,352

¹ Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.

² Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

³ Over-the-counter (OTC).

Gross Credit Risk Exposure (Continued)¹

(\$ millions) As at		LINE #	2018 Q1						2017 Q4					
			Drawn	Undrawn ²	Repo-style transactions	OTC derivatives	Other off- balance sheet	Total	Drawn	Undrawn ²	Repo-style transactions	OTC derivatives	Other off- balance sheet	Total
By Counterparty Type														
Retail														
Residential secured		1	\$ 304,100	\$ 49,080	\$ –	\$ –	\$ –	\$ 353,180	\$ 307,097	\$ 48,514	\$ –	\$ –	\$ –	\$ 355,611
Qualifying revolving retail		2	22,420	70,258	–	–	–	92,678	22,385	71,142	–	–	–	93,527
Other retail		3	87,882	6,475	–	–	39	94,396	88,164	6,378	–	–	35	94,577
		4	414,402	125,813	–	–	39	540,254	417,646	126,034	–	–	35	543,715
Non-retail														
Corporate		5	189,652	71,356	145,888	11,476	15,462	433,834	189,523	70,110	143,807	12,218	15,830	431,488
Sovereign		6	193,419	1,379	32,556	14,982	1,647	243,983	205,315	1,314	30,291	11,146	1,448	249,514
Bank		7	30,624	2,344	68,185	16,960	3,367	121,480	24,562	1,808	64,720	17,810	3,476	112,376
		8	413,695	75,079	246,629	43,418	20,476	799,297	419,400	73,232	238,818	41,174	20,754	793,378
Total		9	\$ 828,097	\$ 200,892	\$ 246,629	\$ 43,418	\$ 20,515	\$ 1,339,551	\$ 837,046	\$ 199,266	\$ 238,818	\$ 41,174	\$ 20,789	\$ 1,337,093
By Country of Risk														
Canada		10	\$ 453,895	\$ 129,455	\$ 85,018	\$ 11,083	\$ 9,274	\$ 688,725	\$ 445,745	\$ 127,430	\$ 80,313	\$ 14,456	\$ 9,438	\$ 677,382
United States		11	304,383	68,201	83,675	12,397	10,366	479,022	325,848	68,344	84,398	10,809	10,526	499,925
Other International														
Europe		12	48,246	2,514	56,327	15,338	508	122,933	43,555	2,637	52,937	12,686	440	112,255
Other		13	21,573	722	21,609	4,600	367	48,871	21,898	855	21,170	3,223	385	47,531
		14	69,819	3,236	77,936	19,938	875	171,804	65,453	3,492	74,107	15,909	825	159,786
Total		15	\$ 828,097	\$ 200,892	\$ 246,629	\$ 43,418	\$ 20,515	\$ 1,339,551	\$ 837,046	\$ 199,266	\$ 238,818	\$ 41,174	\$ 20,789	\$ 1,337,093
By Residual Contractual Maturity														
Within 1 year		16	\$ 286,323	\$ 141,323	\$ 246,629	\$ 21,483	\$ 8,412	\$ 704,170	\$ 283,032	\$ 139,296	\$ 238,818	\$ 19,163	\$ 8,817	\$ 689,126
Over 1 year to 5 years		17	375,838	57,279	–	15,224	11,421	459,762	384,192	57,418	–	15,477	11,307	468,394
Over 5 years		18	165,936	2,290	–	6,711	682	175,619	169,822	2,552	–	6,534	665	179,573
Total		19	\$ 828,097	\$ 200,892	\$ 246,629	\$ 43,418	\$ 20,515	\$ 1,339,551	\$ 837,046	\$ 199,266	\$ 238,818	\$ 41,174	\$ 20,789	\$ 1,337,093
Non-Retail Exposures by Industry Sector														
Real estate														
Residential		20	\$ 23,385	\$ 2,464	\$ 1	\$ 28	\$ 1,503	\$ 27,381	\$ 22,780	\$ 2,401	\$ 17	\$ 43	\$ 1,594	\$ 26,835
Non-residential		21	35,177	4,409	16	227	361	40,190	35,677	4,347	30	331	365	40,750
Total real-estate		22	58,562	6,873	17	255	1,864	67,571	58,457	6,748	47	374	1,959	67,585
Agriculture		23	6,303	280	4	10	20	6,617	6,027	349	5	13	53	6,447
Automotive		24	10,727	4,594	1	629	81	16,032	9,775	4,654	16	486	84	15,015
Financial		25	41,880	10,503	202,065	22,375	1,220	278,043	34,905	9,759	196,673	24,849	1,357	267,543
Food, beverage, and tobacco		26	4,743	2,940	–	314	465	8,462	5,147	3,031	–	405	469	9,052
Forestry		27	1,270	702	–	7	40	2,019	1,139	705	–	8	46	1,898
Government, public sector entities, and education		28	205,985	3,283	33,173	16,592	4,941	263,974	218,563	3,226	30,802	11,982	5,061	269,634
Health and social services		29	16,555	1,180	400	68	1,745	19,948	16,134	1,091	404	98	1,937	19,664
Industrial construction and trade contractors		30	3,823	1,510	57	7	617	6,014	3,863	1,452	36	11	650	6,012
Metals and mining		31	3,197	3,384	235	265	1,024	8,105	3,271	3,336	203	233	987	8,030
Pipelines, oil, and gas		32	6,262	10,009	87	800	2,074	19,232	6,728	9,831	26	656	1,956	19,197
Power and utilities		33	5,318	6,489	16	288	3,418	15,529	5,303	6,833	27	346	3,398	15,907
Professional and other services		34	13,592	4,081	174	125	724	18,696	12,951	4,438	361	94	582	18,426
Retail sector		35	5,854	2,215	389	73	219	8,750	6,332	2,026	448	52	221	9,079
Sundry manufacturing and wholesale		36	9,240	6,072	195	368	553	16,428	9,605	6,422	111	228	516	16,882
Telecommunications, cable, and media		37	4,805	6,857	–	627	275	12,564	5,457	5,447	13	526	296	11,739
Transportation		38	11,298	2,098	110	257	1,086	14,849	11,387	1,962	23	390	1,059	14,821
Other		39	4,281	2,009	9,706	358	110	16,464	4,356	1,922	9,623	423	123	16,447
Total		40	\$ 413,695	\$ 75,079	\$ 246,629	\$ 43,418	\$ 20,476	\$ 799,297	\$ 419,400	\$ 73,232	\$ 238,818	\$ 41,174	\$ 20,754	\$ 793,378

¹ Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.

² Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

Gross Credit Risk Exposure (Continued)¹

(\$ millions) As at		LINE #	2017 Q3					
			Drawn	Undrawn ²	Repo-style transactions	OTC derivatives	Other off-balance sheet	Total
By Counterparty Type								
Retail								
Residential secured		1	\$ 297,264	\$ 47,117	\$ —	\$ —	\$ —	\$ 344,381
Qualifying revolving retail		2	22,772	70,732	—	—	—	93,504
Other retail		3	85,338	6,182	—	—	34	91,554
		4	405,374	124,031	—	—	34	529,439
Non-retail								
Corporate		5	181,633	68,004	129,865	11,041	15,124	405,667
Sovereign		6	182,994	1,257	35,764	11,791	1,372	233,178
Bank		7	25,723	1,610	58,883	16,326	3,360	105,902
		8	390,350	70,871	224,512	39,158	19,856	744,747
Total		9	\$ 795,724	\$ 194,902	\$ 224,512	\$ 39,158	\$ 19,890	\$ 1,274,186
By Country of Risk								
Canada		10	\$ 440,089	\$ 125,253	\$ 75,148	\$ 11,751	\$ 9,203	\$ 661,444
United States		11	289,678	66,278	75,244	10,993	10,022	452,215
Other International								
Europe		12	47,090	2,578	52,368	11,403	381	113,820
Other		13	18,867	793	21,752	5,011	284	46,707
		14	65,957	3,371	74,120	16,414	665	160,527
Total		15	\$ 795,724	\$ 194,902	\$ 224,512	\$ 39,158	\$ 19,890	\$ 1,274,186
By Residual Contractual Maturity								
Within 1 year		16	\$ 264,024	\$ 138,058	\$ 224,512	\$ 18,867	\$ 8,638	\$ 654,099
Over 1 year to 5 years		17	373,748	54,574	—	14,024	10,603	452,949
Over 5 years		18	157,952	2,270	—	6,267	649	167,138
Total		19	\$ 795,724	\$ 194,902	\$ 224,512	\$ 39,158	\$ 19,890	\$ 1,274,186
Non-Retail Exposures by Industry Sector								
Real estate								
Residential		20	\$ 21,881	\$ 2,580	\$ 1	\$ 46	\$ 1,508	\$ 26,016
Non-residential		21	34,429	4,405	8	409	385	39,636
Total real-estate		22	56,310	6,985	9	455	1,893	65,652
Agriculture		23	5,912	355	5	13	26	6,311
Automotive		24	9,605	4,069	57	469	80	14,280
Financial		25	27,483	8,716	176,415	21,523	1,266	235,403
Food, beverage, and tobacco		26	4,593	3,076	—	448	469	8,586
Forestry		27	1,298	663	—	9	42	2,012
Government, public sector entities, and education		28	196,645	2,941	36,631	13,105	4,879	254,201
Health and social services		29	14,997	941	452	99	1,745	18,234
Industrial construction and trade contractors		30	3,795	1,114	67	15	697	5,688
Metals and mining		31	2,948	3,179	252	181	839	7,399
Pipelines, oil, and gas		32	6,291	9,589	25	577	1,912	18,394
Power and utilities		33	5,556	6,265	21	359	3,329	15,530
Professional and other services		34	12,222	4,558	150	154	558	17,642
Retail sector		35	5,966	2,114	457	99	206	8,842
Sundry manufacturing and wholesale		36	9,470	6,059	32	340	435	16,336
Telecommunications, cable, and media		37	5,613	6,402	—	581	309	12,905
Transportation		38	11,272	1,944	31	341	1,031	14,619
Other		39	10,374	1,901	9,908	390	140	22,713
Total		40	\$ 390,350	\$ 70,871	\$ 224,512	\$ 39,158	\$ 19,856	\$ 744,747

¹ Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.

² Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured¹

(\$ millions, except as noted)
As at

LINE
#

2018
Q3

				Notional of undrawn commitments	Average EAD	Average PD ⁵	Average LGD ⁶	RWA	Average risk weighting	EL ⁷	EL adjusted average risk weight ⁸
Insured Drawn and Undrawn ^{2,3}	PD range	EAD ⁴									
Low Risk	0.00 to 0.15 %	\$ 103,607	\$	20,724	90.26 %	0.01 %	20.24 %	\$ 97	0.09 %	\$ –	0.09 %
Normal Risk	0.16 to 0.41	4,421	–	100.00	0.25	8.18	172	3.89	1	4.17	
	0.42 to 1.10	1,751	–	100.00	0.64	8.14	131	7.48	1	8.20	
Medium Risk	1.11 to 2.93	683	–	100.00	1.74	7.50	92	13.47	1	15.30	
	2.94 to 4.74	146	–	100.00	3.73	6.82	28	19.18	–	19.18	
High Risk	4.75 to 7.59	118	–	100.00	6.09	6.11	26	22.03	–	22.03	
	7.60 to 18.20	164	–	100.00	10.37	5.96	44	26.83	1	34.45	
	18.21 to 99.99	65	–	100.00	32.31	4.85	17	26.15	1	45.38	
Default	100.00	22	–	100.00	100.00	6.29	17	77.27	–	77.27	
Total		\$ 110,977	\$	20,724	90.85 %	0.10 %	19.43 %	\$ 624	0.56 %	\$ 5	0.62 %
Uninsured Undrawn²											
Low Risk	0.00 to 0.15 %	\$ 30,216	\$	58,996	51.22 %	0.03 %	20.64 %	\$ 627	2.08 %	\$ 2	2.16 %
Normal Risk	0.16 to 0.41	2,024		3,165	63.95	0.26	33.06	326	16.11	2	17.34
	0.42 to 1.10	449		520	86.36	0.60	37.85	149	33.18	1	35.97
Medium Risk	1.11 to 2.93	52		58	89.38	1.52	31.98	27	51.92	–	51.92
	2.94 to 4.74	–		–	–	–	–	–	–	–	–
High Risk	4.75 to 7.59	–		–	–	–	–	–	–	–	–
	7.60 to 18.20	–		–	–	–	–	–	–	–	–
	18.21 to 99.99	–		–	–	–	–	–	–	–	–
Default	100.00	–		–	–	–	–	–	–	–	–
Total		\$ 32,741	\$	62,739	52.19 %	0.06 %	21.66 %	\$ 1,129	3.45 %	\$ 5	3.64 %
Uninsured Drawn²											
Low Risk	0.00 to 0.15 %	\$ 111,395		n/a	n/a	0.06 %	23.14 %	\$ 3,838	3.45 %	\$ 15	3.61 %
Normal Risk	0.16 to 0.41	37,359		n/a	n/a	0.24	26.31	4,530	12.13	24	12.93
	0.42 to 1.10	14,967		n/a	n/a	0.67	26.76	3,793	25.34	27	27.60
Medium Risk	1.11 to 2.93	5,199		n/a	n/a	1.67	26.88	2,403	46.22	23	51.75
	2.94 to 4.74	1,011		n/a	n/a	3.71	23.80	675	66.77	9	77.89
High Risk	4.75 to 7.59	735		n/a	n/a	5.96	20.02	530	72.11	9	87.41
	7.60 to 18.20	693		n/a	n/a	11.07	19.67	634	91.49	15	118.54
	18.21 to 99.99	428		n/a	n/a	38.30	16.60	361	84.35	28	166.12
Default	100.00	148		n/a	n/a	100.00	18.77	244	164.86	8	232.43
Total		\$ 171,935		n/a	n/a	0.47 %	24.21 %	\$ 17,008	9.89 %	\$ 158	11.04 %
U.S. Retail Uninsured Drawn and Undrawn											
Low Risk	0.00 to 0.15 %	\$ 21,506	\$	10,684	86.12 %	0.06 %	24.02 %	\$ 735	3.42 %	\$ 3	3.59 %
Normal Risk	0.16 to 0.41	11,485		974	96.36	0.25	20.52	1,123	9.78	6	10.43
	0.42 to 1.10	7,731		598	96.29	0.67	24.83	1,834	23.72	13	25.82
Medium Risk	1.11 to 2.93	4,155		792	91.70	1.77	31.73	2,394	57.62	24	64.84
	2.94 to 4.74	1,035		146	93.45	3.67	36.01	1,040	100.48	14	117.39
High Risk	4.75 to 7.59	618		84	93.48	5.97	37.39	835	135.11	14	163.43
	7.60 to 18.20	889		162	91.06	11.75	34.44	1,464	164.68	36	215.30
	18.21 to 99.99	311		27	95.52	33.61	36.77	624	200.64	38	353.38
Default	100.00	780		–	100.00	100.00	29.19	417	53.46	194	364.36
Total		\$ 48,510	\$	13,467	91.01 %	2.54 %	24.77 %	\$ 10,466	21.57 %	\$ 342	30.39 %

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes Canadian residential mortgages and home equity lines of credit (HELOC).

³ Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on page 21.

⁴ Exposure at Default (EAD).

⁵ Probability of Default (PD).

⁶ Loss Given Default (LGD).

⁷ Expected Loss (EL).

⁸ EL adjusted average risk weight is calculated as (RWA + 12.5 x EL) / EAD.

Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)¹

(\$ millions, except as noted)
As at

LNE #	2018 Q2																
	PD range		EAD	Notional of undrawn commitments		Average EAD		Average PD		Average LGD		RWA	Average risk weighting		EL	EL adjusted average risk weight	
1	0.00 to 0.15 %		\$ 106,695	\$	20,916	90.43 %	0.01 %	20.98 %	\$	98	0.09 %	\$	—			0.09 %	
2	0.16 to 0.41		4,734		—	100.00	0.25	8.28		185	3.91		1			4.17	
3	0.42 to 1.10		1,940		—	100.00	0.63	8.28		146	7.53		1			8.17	
4	1.11 to 2.93		639		—	100.00	1.74	7.53		85	13.30		1			15.26	
5	2.94 to 4.74		134		—	100.00	3.67	6.93		26	19.40		—			19.40	
6	4.75 to 7.59		127		—	100.00	6.05	6.25		29	22.83		—			22.83	
7	7.60 to 18.20		187		—	100.00	10.64	6.05		52	27.81		1			34.49	
8	18.21 to 99.99		69		—	100.00	34.80	5.33		19	27.54		1			45.65	
9	100.00		23		—	100.00	100.00	6.37		18	78.26		—			78.26	
10	\$		114,548	\$	20,916	91.02 %	0.11 %	20.10 %	\$	658	0.57 %	\$	5			0.63 %	
11	0.00 to 0.15 %		\$ 29,062	\$	57,018	50.97 %	0.03 %	20.55 %	\$	602	2.07 %	\$	2			2.16 %	
12	0.16 to 0.41		2,037		3,256	62.56	0.26	32.44		322	15.81		2			17.03	
13	0.42 to 1.10		440		594	74.06	0.60	36.51		140	31.82		1			34.66	
14	1.11 to 2.93		69		87	79.55	1.60	31.54		37	53.62		—			53.62	
15	2.94 to 4.74		5		6	85.03	3.62	26.41		4	80.00		—			80.00	
16	4.75 to 7.59		2		2	91.27	5.86	25.59		2	100.00		—			100.00	
17	7.60 to 18.20		1		1	98.25	10.99	20.22		1	100.00		—			100.00	
18	18.21 to 99.99		—		—	—	—	—		—	—		—			—	
19	100.00		—		—	—	—	—		—	—		—			—	
20	\$		31,616	\$	60,964	51.86 %	0.06 %	21.57 %	\$	1,108	3.50 %	\$	5			3.70 %	
21	0.00 to 0.15 %		\$ 104,266		n/a	n/a	0.06 %	23.68 %	\$	3,700	3.55 %	\$	14			3.72 %	
22	0.16 to 0.41		37,129		n/a	n/a	0.24	26.54		4,546	12.24		24			13.05	
23	0.42 to 1.10		13,251		n/a	n/a	0.65	27.82		3,416	25.78		24			28.04	
24	1.11 to 2.93		4,856		n/a	n/a	1.68	26.73		2,250	46.33		22			52.00	
25	2.94 to 4.74		977		n/a	n/a	3.69	24.53		671	68.68		9			80.19	
26	4.75 to 7.59		697		n/a	n/a	5.96	20.50		514	73.74		9			89.89	
27	7.60 to 18.20		664		n/a	n/a	11.10	19.99		615	92.62		14			118.98	
28	18.21 to 99.99		419		n/a	n/a	38.96	16.94		342	81.62		30			171.12	
29	100.00		152		n/a	n/a	100.00	19.35		252	165.79		9			239.80	
30	\$		162,411		n/a	n/a	0.48 %	24.72 %	\$	16,306	10.04 %	\$	155			11.23 %	
31	0.00 to 0.15 %		\$ 20,877	\$	10,349	86.11 %	0.06 %	24.00 %	\$	711	3.41 %	\$	3			3.59 %	
32	0.16 to 0.41		10,959		901	96.38	0.25	20.45		1,070	9.76		6			10.45	
33	0.42 to 1.10		7,394		584	96.14	0.68	24.84		1,764	23.86		13			26.05	
34	1.11 to 2.93		4,096		783	91.65	1.79	31.95		2,391	58.37		24			65.70	
35	2.94 to 4.74		1,064		135	93.97	3.69	36.31		1,080	101.50		14			117.95	
36	4.75 to 7.59		592		73	93.98	5.97	37.10		791	133.61		13			161.06	
37	7.60 to 18.20		842		143	91.87	11.72	35.00		1,405	166.86		35			218.82	
38	18.21 to 99.99		319		25	95.95	33.88	36.07		622	194.98		40			351.72	
39	100.00		786		—	100.00	100.00	29.83		427	54.33		200			372.39	
40	\$		46,929	\$	12,993	91.00 %	2.62 %	24.82 %	\$	10,261	21.86 %	\$	348			31.13 %	

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes Canadian residential mortgages and HELOC.

³ Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on page 21.

Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)¹

(\$ millions, except as noted)
As at

LINE #		2018 Q1											
		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight		
Insured Drawn and Undrawn^{2,3}													
Low Risk	1	0.00 to 0.15 %	\$ 108,637	\$ 21,051	90.50 %	— %	24.22 %	\$ 107	0.10 %	\$ —	0.10 %		
Normal Risk	2	0.16 to 0.41	5,079	—	100.00	0.25	8.96	215	4.23	1	4.48		
	3	0.42 to 1.10	2,460	—	100.00	0.64	9.05	204	8.29	1	8.80		
Medium Risk	4	1.11 to 2.93	849	—	100.00	1.73	9.27	139	16.37	1	17.84		
	5	2.94 to 4.74	186	—	100.00	3.69	9.38	49	26.34	1	33.06		
High Risk	6	4.75 to 7.59	132	—	100.00	6.12	8.66	42	31.82	1	41.29		
	7	7.60 to 18.20	208	—	100.00	10.67	8.04	77	37.02	2	49.04		
	8	18.21 to 99.99	89	—	100.00	31.35	8.88	43	48.31	2	76.40		
Default	9	100.00	23	—	100.00	100.00	8.03	24	104.35	—	104.35		
Total	10		\$ 117,663	\$ 21,051	91.16 %	0.12 %	23.05 %	\$ 900	0.76 %	\$ 9	0.86 %		
Uninsured Undrawn²													
Low Risk	11	0.00 to 0.15 %	\$ 28,237	\$ 54,846	51.48 %	0.03 %	21.11 %	\$ 603	2.14 %	\$ 2	2.22 %		
Normal Risk	12	0.16 to 0.41	2,689	3,986	67.46	0.25	35.40	458	17.03	2	17.96		
	13	0.42 to 1.10	406	613	66.25	0.61	31.40	113	27.83	1	30.91		
Medium Risk	14	1.11 to 2.93	86	99	86.88	1.63	32.63	48	55.81	—	55.81		
	15	2.94 to 4.74	9	10	85.68	3.67	25.29	6	66.67	—	66.67		
High Risk	16	4.75 to 7.59	4	5	84.25	5.92	22.23	3	75.00	—	75.00		
	17	7.60 to 18.20	2	3	95.89	11.41	18.87	2	100.00	—	100.00		
	18	18.21 to 99.99	1	1	98.31	28.95	13.07	1	100.00	—	100.00		
Default	19	100.00	—	—	—	—	—	—	—	—	—		
Total	20		\$ 31,434	\$ 59,563	52.78 %	0.07 %	22.50 %	\$ 1,234	3.93 %	\$ 5	4.12 %		
Uninsured Drawn²													
Low Risk	21	0.00 to 0.15 %	\$ 100,237	n/a	n/a	0.06 %	23.53 %	\$ 3,450	3.44 %	\$ 13	3.60 %		
Normal Risk	22	0.16 to 0.41	33,751	n/a	n/a	0.25	26.56	4,221	12.51	22	13.32		
	23	0.42 to 1.10	15,195	n/a	n/a	0.64	25.39	3,558	23.42	25	25.48		
Medium Risk	24	1.11 to 2.93	4,977	n/a	n/a	1.70	26.89	2,339	47.00	23	52.77		
	25	2.94 to 4.74	914	n/a	n/a	3.68	25.70	657	71.88	9	84.19		
High Risk	26	4.75 to 7.59	518	n/a	n/a	6.01	22.70	425	82.05	7	98.94		
	27	7.60 to 18.20	708	n/a	n/a	11.44	19.60	652	92.09	16	120.34		
	28	18.21 to 99.99	351	n/a	n/a	35.84	16.14	302	86.04	20	157.26		
Default	29	100.00	150	n/a	n/a	100.00	18.62	262	174.67	7	233.00		
Total	30		\$ 156,801	n/a	n/a	0.47 %	24.44 %	\$ 15,866	10.12 %	\$ 142	11.25 %		
U.S. Retail Uninsured Drawn and Undrawn													
Low Risk	31	0.00 to 0.15 %	\$ 20,906	\$ 9,736	86.53 %	0.06 %	23.22 %	\$ 695	3.32 %	\$ 3	3.50 %		
Normal Risk	32	0.16 to 0.41	9,990	847	96.26	0.25	21.06	1,004	10.05	5	10.68		
	33	0.42 to 1.10	6,562	537	95.99	0.67	25.70	1,615	24.61	11	26.71		
Medium Risk	34	1.11 to 2.93	3,712	668	92.11	1.79	31.99	2,166	58.35	22	65.76		
	35	2.94 to 4.74	952	123	94.15	3.69	36.48	972	102.10	13	119.17		
High Risk	36	4.75 to 7.59	540	68	93.47	5.94	37.88	737	136.48	12	164.26		
	37	7.60 to 18.20	824	137	91.52	11.70	35.20	1,385	168.08	34	219.66		
	38	18.21 to 99.99	302	27	95.82	34.93	37.82	619	204.97	39	366.39		
Default	39	100.00	769	—	100.00	100.00	29.74	409	53.19	196	371.78		
Total	40		\$ 44,557	\$ 12,143	90.97 %	2.66 %	24.72 %	\$ 9,602	21.55 %	\$ 335	30.95 %		

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes Canadian residential mortgages and HELOC.

³ Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on page 21.

Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)¹

(\$ millions, except as noted)
As at

LINE #	2017 Q4													
	PD range		EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight			
1	0.00 to 0.15	% \$	111,737	\$ 21,056	90.75 %	— %	24.44 % \$	105	0.09 % \$	—	0.09 %			
2	0.16 to 0.41		5,505	—	100.00	0.25	8.97	233	4.23	1	4.46			
3	0.42 to 1.10		2,546	—	100.00	0.63	8.98	208	8.17	1	8.66			
4	1.11 to 2.93		872	—	100.00	1.72	9.29	143	16.40	1	17.83			
5	2.94 to 4.74		200	—	100.00	3.67	9.42	53	26.50	1	32.75			
6	4.75 to 7.59		159	—	100.00	6.26	8.35	49	30.82	1	38.68			
7	7.60 to 18.20		200	—	100.00	10.59	8.07	75	37.50	2	50.00			
8	18.21 to 99.99		88	—	100.00	32.76	8.73	42	47.73	3	90.34			
9	100.00		29	—	100.00	100.00	8.09	29	100.00	—	100.00			
10		\$	121,336	\$ 21,056	91.42 %	0.12 %	23.22 % \$	937	0.77 % \$	10	0.88 %			
11	0.00 to 0.15	% \$	27,900	\$ 53,564	52.09 %	0.03 %	21.39 % \$	607	2.18 % \$	2	2.27 %			
12	0.16 to 0.41		2,216	3,328	66.59	0.25	34.72	366	16.52	2	17.64			
13	0.42 to 1.10		457	628	72.85	0.61	32.12	132	28.88	1	31.62			
14	1.11 to 2.93		86	98	87.70	1.63	32.88	48	55.81	—	55.81			
15	2.94 to 4.74		8	10	82.15	3.65	28.61	7	87.50	—	87.50			
16	4.75 to 7.59		3	3	100.00	5.91	18.35	2	66.67	—	66.67			
17	7.60 to 18.20		2	3	93.55	10.41	16.86	2	100.00	—	100.00			
18	18.21 to 99.99		1	1	75.41	36.41	13.15	1	100.00	—	100.00			
19	100.00		—	—	—	—	—	—	—	—	—			
20		\$	30,673	\$ 57,635	53.22 %	0.07 %	22.55 % \$	1,165	3.80 % \$	5	4.00 %			
21	0.00 to 0.15	% \$	96,157	n/a	n/a	0.06 %	23.30 % \$	3,284	3.42 % \$	12	3.57 %			
22	0.16 to 0.41		32,471	n/a	n/a	0.25	26.11	3,974	12.24	21	13.05			
23	0.42 to 1.10		15,188	n/a	n/a	0.64	25.57	3,585	23.60	25	25.66			
24	1.11 to 2.93		4,967	n/a	n/a	1.70	26.71	2,319	46.69	23	52.48			
25	2.94 to 4.74		866	n/a	n/a	3.69	25.78	625	72.17	8	83.72			
26	4.75 to 7.59		539	n/a	n/a	6.03	22.46	438	81.26	7	97.50			
27	7.60 to 18.20		662	n/a	n/a	11.32	19.41	604	91.24	14	117.67			
28	18.21 to 99.99		365	n/a	n/a	37.52	16.30	312	85.48	21	157.40			
29	100.00		154	n/a	n/a	100.00	18.57	269	174.68	7	231.49			
30		\$	151,369	n/a	n/a	0.49 %	24.21 % \$	15,410	10.18 % \$	138	11.32 %			
31	0.00 to 0.15	% \$	20,825	\$ 9,921	86.12 %	0.06 %	23.66 % \$	709	3.40 % \$	3	3.58 %			
32	0.16 to 0.41		10,655	944	96.19	0.25	21.66	1,103	10.35	6	11.06			
33	0.42 to 1.10		7,225	582	96.06	0.67	26.08	1,799	24.90	13	27.15			
34	1.11 to 2.93		4,060	673	92.63	1.78	32.59	2,406	59.26	24	66.65			
35	2.94 to 4.74		999	119	94.69	3.68	36.98	1,033	103.40	14	120.92			
36	4.75 to 7.59		586	73	93.50	5.98	37.37	790	134.81	13	162.54			
37	7.60 to 18.20		892	150	91.57	11.73	35.74	1,521	170.52	37	222.37			
38	18.21 to 99.99		317	29	95.72	33.44	38.66	669	211.04	41	372.71			
39	100.00		812	—	100.00	100.00	30.87	453	55.79	215	386.76			
40		\$	46,371	\$ 12,491	90.99 %	2.71 %	25.28 % \$	10,483	22.61 % \$	366	32.47 %			

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes Canadian residential mortgages and HELOC.

³ Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on page 21.

Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)¹

(\$ millions, except as noted)
As at

LINE #	2017 Q3																					
	PD range		EAD		Notional of undrawn commitments		Average EAD		Average PD		Average LGD		RWA		Average risk weighting		EL		EL adjusted average risk weight			
1	0.00 to 0.15		%	\$	114,234	\$	21,301	90.76	%	—	%	25.21	%	\$	104	0.09	%	\$	—	0.09	%	
2	0.16 to 0.41				5,996		—	100.00		0.25		9.23			264	4.40		1		4.61		
3	0.42 to 1.10				2,613		—	100.00		0.63		9.23			219	8.38		2		9.34		
4	1.11 to 2.93				871		—	100.00		1.73		9.41			145	16.65		1		18.08		
5	2.94 to 4.74				201		—	100.00		3.71		9.41			53	26.37		1		32.59		
6	4.75 to 7.59				143		—	100.00		6.09		8.88			46	32.17		1		40.91		
7	7.60 to 18.20				240		—	100.00		10.19		7.96			86	35.83		2		46.25		
8	18.21 to 99.99				96		—	100.00		31.90		8.91			47	48.96		3		88.02		
9	100.00				38		—	100.00		100.00		8.09			38	100.00		—		100.00		
10			\$		124,432	\$		21,301	91.45	%	0.13	%	23.90	%	\$	1,002	0.81	%	\$	11	0.92	%
11	0.00 to 0.15		%	\$	25,882	\$	50,709	51.04	%	0.03	%	19.97	%	\$	519	2.01	%	\$	2		2.10	%
12	0.16 to 0.41				3,347		4,405	76.00		0.26		38.71			634	18.94		3		20.06		
13	0.42 to 1.10				395		535	73.87		0.58		30.37			103	26.08		1		29.24		
14	1.11 to 2.93				56		73	76.36		1.61		33.09			31	55.36		—		55.36		
15	2.94 to 4.74				6		7	87.07		3.67		24.68			4	66.67		—		66.67		
16	4.75 to 7.59				3		3	80.08		5.91		21.11			2	66.67		—		66.67		
17	7.60 to 18.20				1		1	100.00		11.36		20.67			1	100.00		—		100.00		
18	18.21 to 99.99				1		1	84.43		26.67		12.83			1	100.00		—		100.00		
19	100.00				—		—	—		—		—			—	—		—		—		
20			\$		29,691	\$		55,734	53.27	%	0.07	%	22.25	%	\$	1,295	4.36	%	\$	6	4.61	%
21	0.00 to 0.15		%	\$	90,705		n/a	n/a		0.06	%	22.95	%	\$	3,028	3.34	%	\$	12		3.50	%
22	0.16 to 0.41				32,670		n/a	n/a		0.25		26.92			4,191	12.83		22		13.67		
23	0.42 to 1.10				13,896		n/a	n/a		0.64		24.32			3,115	22.42		22		24.40		
24	1.11 to 2.93				4,506		n/a	n/a		1.70		25.67			2,027	44.98		20		50.53		
25	2.94 to 4.74				817		n/a	n/a		3.69		24.74			566	69.28		7		79.99		
26	4.75 to 7.59				550		n/a	n/a		5.98		22.00			436	79.27		7		95.18		
27	7.60 to 18.20				647		n/a	n/a		11.35		19.66			597	92.27		14		119.32		
28	18.21 to 99.99				370		n/a	n/a		38.77		16.37			317	85.68		22		160.00		
29	100.00				159		n/a	n/a		100.00		19.74			288	181.13		8		244.03		
30			\$		144,320		n/a	n/a		0.51	%	24.03	%	\$	14,565	10.09	%	\$	134		11.25	%
31	0.00 to 0.15		%	\$	12,956	\$	9,390	80.40	%	0.07	%	31.15	%	\$	569	4.39	%	\$	2		4.58	%
32	0.16 to 0.41				13,981		892	97.14		0.26		19.45			1,317	9.42		7		10.05		
33	0.42 to 1.10				9,459		565	97.03		0.66		23.85			2,134	22.56		15		24.54		
34	1.11 to 2.93				4,579		632	93.82		1.76		30.73			2,545	55.58		25		62.40		
35	2.94 to 4.74				1,123		119	95.04		3.67		35.04			1,097	97.68		14		113.27		
36	4.75 to 7.59				655		62	95.35		5.94		36.02			848	129.47		14		156.18		
37	7.60 to 18.20				717		139	90.52		11.46		39.58			1,344	187.45		33		244.98		
38	18.21 to 99.99				284		30	95.20		34.41		39.78			606	213.38		39		385.04		
39	100.00				796		—	100.00		100.00		31.96			461	57.91		217		398.68		
40			\$		44,550	\$		11,829	91.12	%	2.79	%	26.26	%	\$	10,921	24.51	%	\$	366	34.78	%

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes Canadian residential mortgages and HELOC.

³ Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on page 21.

Retail Advanced IRB Exposures – By Obligor Grade – Qualifying Revolving Retail¹

(\$ millions, except as noted)
As at

LINE
#

2018
Q3

		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
		% \$	\$		%	%	% \$		% \$		%
Low Risk	1	0.00 to 0.15	60,797	90,071	64.13	0.04	88.02	1,579	2.60	24	3.09
Normal Risk	2	0.16 to 0.41	13,619	16,745	67.78	0.25	89.49	1,564	11.48	31	14.33
	3	0.42 to 1.10	12,235	11,596	72.66	0.70	89.35	3,142	25.68	76	33.45
Medium Risk	4	1.11 to 2.93	10,755	6,489	80.73	1.86	89.70	5,826	54.17	179	74.97
	5	2.94 to 4.74	4,601	1,795	89.22	3.73	89.43	4,111	89.35	153	130.92
High Risk	6	4.75 to 7.59	3,291	943	94.08	5.97	89.46	4,016	122.03	176	188.88
	7	7.60 to 18.20	3,011	637	97.08	11.14	88.41	5,215	173.20	296	296.08
	8	18.21 to 99.99	1,436	222	97.96	34.66	83.14	3,258	226.88	425	596.83
Default	9	100.00	107	–	100.00	100.00	72.79	23	21.50	76	909.35
Total	10		\$ 109,852	\$ 128,498	69.36	1.51	88.55	\$ 28,734	26.16	\$ 1,436	42.50

2018
Q2

		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
		% \$	\$		%	%	% \$		% \$		%
Low Risk	11	0.00 to 0.15	53,035	72,172	69.43	0.04	88.01	1,351	2.55	20	3.02
Normal Risk	12	0.16 to 0.41	11,760	12,934	73.57	0.25	89.55	1,352	11.50	27	14.37
	13	0.42 to 1.10	10,671	9,403	76.11	0.71	89.16	2,766	25.92	67	33.77
Medium Risk	14	1.11 to 2.93	8,381	5,062	80.14	1.85	89.99	4,543	54.21	139	74.94
	15	2.94 to 4.74	3,233	1,374	85.66	3.71	90.08	2,902	89.76	108	131.52
High Risk	16	4.75 to 7.59	2,119	680	89.67	5.94	90.26	2,603	122.84	114	190.09
	17	7.60 to 18.20	1,783	384	94.09	11.06	89.02	3,095	173.58	175	296.27
	18	18.21 to 99.99	773	167	96.19	37.89	79.43	1,549	200.39	246	598.19
Default	19	100.00	128	–	100.00	100.00	73.65	29	22.66	92	921.09
Total	20		\$ 91,883	\$ 102,176	73.03	1.25	88.57	\$ 20,190	21.97	\$ 988	35.41

2018
Q1

		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
		% \$	\$		%	%	% \$		% \$		%
Low Risk	21	0.00 to 0.15	55,744	69,858	75.25	0.04	88.08	1,387	2.49	21	2.96
Normal Risk	22	0.16 to 0.41	11,272	12,327	74.09	0.25	89.54	1,295	11.49	25	14.26
	23	0.42 to 1.10	9,823	8,808	75.43	0.70	89.21	2,525	25.70	61	33.47
Medium Risk	24	1.11 to 2.93	7,763	4,995	78.86	1.84	89.51	4,176	53.79	128	74.40
	25	2.94 to 4.74	3,121	1,427	85.02	3.72	89.39	2,782	89.14	104	130.79
High Risk	26	4.75 to 7.59	2,123	721	89.55	5.95	89.76	2,596	122.28	113	188.81
	27	7.60 to 18.20	1,894	430	94.71	11.09	88.45	3,272	172.76	185	294.85
	28	18.21 to 99.99	818	177	96.65	37.36	79.53	1,654	202.20	256	593.40
Default	29	100.00	120	–	100.00	100.00	71.63	19	15.83	85	901.25
Total	30		\$ 92,678	\$ 98,743	76.49	1.23	88.49	\$ 19,706	21.26	\$ 978	34.45

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

Retail Advanced IRB Exposures – By Obligor Grade – Qualifying Revolving Retail (Continued)¹

(\$ millions, except as noted)
As at

(\$ millions, except as noted) As at		LINE #	2017 Q4									
			PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
Low Risk	1		0.00 to 0.15 % \$	56,813 \$	69,849	76.69 %	0.04 %	88.11 % \$	1,409	2.48 % \$	21	2.94 %
Normal Risk	2		0.16 to 0.41	11,251	12,128	74.84	0.25	89.42	1,290	11.47	25	14.24
	3		0.42 to 1.10	9,883	8,764	75.99	0.70	89.17	2,542	25.72	62	33.56
Medium Risk	4		1.11 to 2.93	7,689	4,821	79.51	1.84	89.53	4,135	53.78	127	74.42
	5		2.94 to 4.74	3,082	1,369	85.60	3.71	89.32	2,743	89.00	102	130.37
High Risk	6		4.75 to 7.59	2,062	656	90.61	5.96	89.88	2,525	122.45	110	189.14
	7		7.60 to 18.20	1,829	394	95.19	11.09	88.39	3,158	172.66	179	295.00
	8		18.21 to 99.99	797	165	97.26	37.52	79.29	1,610	202.01	250	594.10
Default	9		100.00	121	—	100.00	100.00	71.64	20	16.53	85	894.63
Total	10		\$	93,527 \$	98,146	77.60 %	1.20 %	88.49 % \$	19,432	20.78 % \$	961	33.62 %

		2017 Q3													
		PD range		EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight			
Low Risk	11	0.00 to 0.15	% \$	57,297	\$ 70,575	76.22	% 0.04	% 88.13	% \$ 1,426	2.49	% \$ 21	2.95	%		
Normal Risk	12	0.16 to 0.41		11,272	12,004	75.51	0.25	89.35	1,291	11.45	25	14.23			
	13	0.42 to 1.10		9,437	8,135	76.47	0.70	88.93	2,410	25.54	58	33.22			
Medium Risk	14	1.11 to 2.93		7,644	4,699	79.95	1.85	89.09	4,099	53.62	126	74.23			
	15	2.94 to 4.74		3,051	1,340	85.34	3.71	88.97	2,705	88.66	101	130.04			
High Risk	16	4.75 to 7.59		2,027	630	90.35	5.96	89.38	2,469	121.81	108	188.41			
	17	7.60 to 18.20		1,838	387	94.95	11.13	87.78	3,157	171.76	179	293.50			
	18	18.21 to 99.99		812	172	97.42	35.87	78.56	1,659	204.31	240	573.77			
Default	19	100.00		126	—	100.00	100.00	73.48	14	11.11	92	923.81			
Total	20		\$	93,504	\$ 97,942	77.46	% 1.19	% 88.38	% \$ 19,230	20.57	% \$ 950	33.27	%		

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

Retail Advanced IRB Exposures – By Obligor Grade – Other Retail^{1,2}

(\$ millions, except as noted)
As at

LINE #		2018 Q3											
		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight		
Low Risk	1	0.00 to 0.15 %	\$ 13,150	\$ 4,173	89.88 %	0.07 %	45.42 %	\$ 1,144	8.70 %	\$ 4	9.08 %		
Normal Risk	2	0.16 to 0.41	19,501	3,617	91.57	0.30	40.98	4,042	20.73	23	22.20		
	3	0.42 to 1.10	15,221	1,911	95.57	0.72	49.17	6,455	42.41	54	46.84		
Medium Risk	4	1.11 to 2.93	14,440	755	98.12	1.85	49.92	8,966	62.09	133	73.60		
	5	2.94 to 4.74	5,764	327	97.33	3.72	50.36	4,162	72.21	108	95.63		
High Risk	6	4.75 to 7.59	4,156	189	97.61	5.95	50.39	3,148	75.75	124	113.04		
	7	7.60 to 18.20	4,380	65	99.55	11.47	49.28	3,809	86.96	247	157.45		
	8	18.21 to 99.99	2,110	31	99.15	35.47	48.96	2,428	115.07	364	330.71		
Default	9	100.00	407	4	100.00	100.00	48.03	236	57.99	177	601.60		
Total	10		\$ 79,129	\$ 11,072	94.56 %	3.24 %	46.81 %	\$ 34,390	43.46 %	\$ 1,234	62.95 %		

		2018 Q2											
		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight		
Low Risk	11	0.00 to 0.15 %	\$ 12,895	\$ 4,123	89.88 %	0.07 %	45.14 %	\$ 1,118	8.67 %	\$ 4	9.06 %		
Normal Risk	12	0.16 to 0.41	19,051	3,494	91.75	0.30	40.59	3,912	20.53	22	21.98		
	13	0.42 to 1.10	14,865	1,853	95.62	0.72	49.08	6,287	42.29	53	46.75		
Medium Risk	14	1.11 to 2.93	13,984	707	98.19	1.86	50.17	8,729	62.42	130	74.04		
	15	2.94 to 4.74	5,549	293	97.45	3.72	50.29	4,001	72.10	104	95.53		
High Risk	16	4.75 to 7.59	4,045	174	97.70	5.97	50.40	3,067	75.82	122	113.52		
	17	7.60 to 18.20	4,332	55	99.61	11.46	49.34	3,768	86.98	244	157.39		
	18	18.21 to 99.99	2,059	29	99.20	34.98	48.91	2,374	115.30	350	327.78		
Default	19	100.00	390	4	100.00	100.00	48.42	228	58.46	170	603.33		
Total	20		\$ 77,170	\$ 10,732	94.63 %	3.22 %	46.69 %	\$ 33,484	43.39 %	\$ 1,199	62.81 %		

		2018 Q1											
		PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight		
Low Risk	21	0.00 to 0.15 %	\$ 13,379	\$ 4,147	90.18 %	0.07 %	41.74 %	\$ 1,066	7.97 %	\$ 4	8.34 %		
Normal Risk	22	0.16 to 0.41	18,757	3,454	91.73	0.29	39.08	3,701	19.73	21	21.13		
	23	0.42 to 1.10	14,557	1,807	95.76	0.72	47.68	5,985	41.11	50	45.41		
Medium Risk	24	1.11 to 2.93	13,286	707	98.19	1.85	49.35	8,151	61.35	121	72.73		
	25	2.94 to 4.74	5,152	332	97.03	3.73	49.59	3,664	71.12	95	94.17		
High Risk	26	4.75 to 7.59	3,658	118	98.22	5.97	49.49	2,723	74.44	108	111.34		
	27	7.60 to 18.20	3,982	58	99.63	11.50	48.51	3,409	85.61	221	154.98		
	28	18.21 to 99.99	2,007	37	98.85	35.32	47.77	2,249	112.06	337	321.95		
Default	29	100.00	398	4	100.00	100.00	47.96	188	47.24	176	600.00		
Total	30		\$ 75,176	\$ 10,664	94.59 %	3.18 %	45.04 %	\$ 31,136	41.42 %	\$ 1,133	60.26 %		

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes all other retail exposures, such as drawn and undrawn retail exposures outside of Canada.

Retail Advanced IRB Exposures – By Obligor Grade – Other Retail (Continued)^{1,2}

(\$ millions, except as noted)
As at

		2017 Q4											
		LINE #											
				PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
Low Risk	1			0.00 to 0.15 %	\$ 13,651	\$ 4,083	90.58 %	0.07 %	42.19 %	\$ 1,095	8.02 %	\$ 4	8.39 %
Normal Risk	2			0.16 to 0.41	18,500	3,450	91.58	0.29	39.76	3,718	20.10	21	21.52
	3			0.42 to 1.10	14,933	1,787	95.79	0.72	47.45	6,104	40.88	51	45.15
Medium Risk	4			1.11 to 2.93	13,613	738	98.08	1.85	48.90	8,277	60.80	123	72.10
	5			2.94 to 4.74	5,076	263	97.52	3.70	49.31	3,587	70.67	93	93.57
High Risk	6			4.75 to 7.59	3,616	111	98.31	5.97	49.29	2,681	74.14	106	110.79
	7			7.60 to 18.20	3,899	58	99.58	11.42	48.73	3,346	85.82	216	155.07
	8			18.21 to 99.99	1,907	35	99.05	34.97	48.17	2,163	113.42	319	322.52
Default	9			100.00	371	4	100.00	100.00	46.88	166	44.74	160	583.83
Total	10				\$ 75,566	\$ 10,529	94.65 %	3.06 %	45.17 %	\$ 31,137	41.21 %	\$ 1,093	59.29 %

		2017 Q3											
				PD range	EAD	Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
Low Risk	11			0.00 to 0.15 %	\$ 13,380	\$ 4,014	90.49 %	0.07 %	42.80 %	\$ 1,082	8.09 %	\$ 4	8.46 %
Normal Risk	12			0.16 to 0.41	18,096	3,249	91.95	0.29	39.46	3,609	19.94	20	21.33
	13			0.42 to 1.10	14,474	1,735	95.83	0.72	47.87	5,991	41.39	50	45.71
Medium Risk	14			1.11 to 2.93	12,992	717	98.04	1.85	49.15	7,942	61.13	118	72.48
	15			2.94 to 4.74	4,783	218	97.99	3.71	49.47	3,391	70.90	88	93.90
High Risk	16			4.75 to 7.59	3,402	99	98.41	5.98	49.72	2,545	74.81	101	111.92
	17			7.60 to 18.20	3,595	56	99.59	11.43	49.29	3,123	86.87	202	157.11
	18			18.21 to 99.99	1,721	29	99.05	34.41	49.32	2,012	116.91	291	328.27
Default	19			100.00	370	5	100.00	100.00	47.41	165	44.59	162	591.89
Total	20				\$ 72,813	\$ 10,122	94.71 %	2.97 %	45.37 %	\$ 29,860	41.01 %	\$ 1,036	58.79 %

¹ Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

² Includes all other retail exposures, such as drawn and undrawn retail exposures outside of Canada.

Non-Retail Advanced IRB Exposures – By Obligor Grade – Corporate

(\$ millions, except as noted)
As at

(\$ millions, except as noted) As at			LINE #	2018 Q3					2018 Q2					2018 Q1				
PD Range ¹ Investment Grade (%)	Internal ratings grade (BRR) ²	External rating equivalent		EAD ³	Average PD	Average LGD	RWA	Average risk weighting	EAD ³	Average PD	Average LGD	RWA	Average risk weighting	EAD ³	Average PD	Average LGD	RWA	Average risk weighting
0.00 to 0.01	0	AAA/Aaa	1	\$ 12,443	—	% 67.76	% \$ 20	0.16	\$ 12,229	—	% 67.41	% \$ 23	0.19	\$ 11,840	—	% 67.31	% \$ 26	0.22
0.01 to 0.03	1A	AA+/Aa1	2	28,605	0.03	1.63	68	0.24	30,441	0.03	1.46	66	0.22	28,806	0.03	1.99	77	0.27
0.03 to 0.03	1B	AA/Aa2	3	33,441	0.03	2.42	219	0.65	32,275	0.03	3.37	249	0.77	22,722	0.03	3.11	195	0.86
0.03 to 0.04	1C	AA-/Aa3	4	13,955	0.04	13.60	775	5.55	13,851	0.04	13.84	849	6.13	12,689	0.04	15.64	896	7.06
0.04 to 0.05	2A	A+/A1	5	21,238	0.04	12.01	1,027	4.84	19,559	0.05	10.80	856	4.38	17,160	0.05	12.48	878	5.12
0.05 to 0.07	2B	A/A2	6	9,972	0.05	33.08	1,742	17.47	10,519	0.06	32.84	1,820	17.30	9,360	0.06	29.99	1,459	15.59
0.07 to 0.09	2C	A-/A3	7	25,748	0.07	15.30	2,270	8.82	23,755	0.07	10.88	1,483	6.24	21,948	0.07	11.75	1,365	6.22
0.09 to 0.11	3A	BBB+/Baa1	8	34,857	0.09	19.48	3,970	11.39	33,355	0.09	19.96	4,013	12.03	29,858	0.09	19.29	3,559	11.92
0.11 to 0.15	3B	BBB/Baa2	9	28,903	0.11	21.02	4,990	17.26	28,953	0.12	19.49	4,611	15.93	32,459	0.12	17.38	4,377	13.48
0.15 to 0.22	3C	BBB-/Baa3	10	35,907	0.16	17.38	5,930	16.51	33,206	0.16	18.55	5,919	17.83	31,340	0.16	18.26	5,493	17.53
Non-Investment Grade																		
0.22 to 0.31	4A	BB+/Ba1	11	24,855	0.22	14.08	3,904	15.71	25,856	0.23	14.40	4,142	16.02	25,896	0.23	14.49	4,157	16.05
0.31 to 0.47	4B	BB/Ba2	12	17,724	0.31	26.02	5,897	33.27	17,263	0.32	24.73	5,523	31.99	15,729	0.32	25.74	5,204	33.09
0.47 to 0.72	4C	BB-/Ba3	13	12,862	0.47	24.36	5,072	39.43	13,001	0.49	25.53	5,445	41.88	10,458	0.49	24.85	3,983	38.09
0.72 to 1.10	5A	B+/B1	14	8,823	0.72	28.60	4,541	51.47	8,527	0.74	29.99	4,662	54.67	8,108	0.74	29.34	4,390	54.14
1.10 to 2.34	5B	B/B2	15	9,774	1.10	34.51	7,422	75.94	8,800	1.13	32.55	6,077	69.06	8,815	1.13	33.13	6,243	70.82
2.34 to 10.63	5C	B-/B3	16	24,593	2.35	13.99	9,046	36.78	22,846	2.39	14.96	9,015	39.46	23,224	2.40	14.29	8,736	37.62
Watch and Classified																		
10.63 to 19.81	6	CCC+/Caa1	17	978	10.63	38.54	1,657	169.43	1,077	10.81	40.39	1,948	180.87	1,008	10.81	33.64	1,472	146.03
19.81 to 45.45	7	to	18	1,143	19.81	30.74	1,794	156.96	1,435	20.32	30.08	2,223	154.91	1,443	20.32	32.04	2,398	166.18
45.45 to 99.99	8	CC/Ca	19	230	45.45	44.82	510	221.74	244	44.72	44.08	538	220.49	215	44.72	44.95	483	224.65
Impaired/Default																		
100.00	9	D	20	149	100.00	56.77	459	308.05	140	100.00	53.69	359	256.43	183	100.00	47.70	397	216.94
Total			21	\$ 346,200	0.49	% 17.91	% \$ 61,313	17.71	\$ 337,332	0.51	% 17.64	% \$ 59,821	17.73	\$ 313,261	0.55	% 17.84	% \$ 55,788	17.81

			2017 Q4					2017 Q3							
PD Range ¹ Investment Grade (%)	Internal ratings grade (BRR)	External rating equivalent		Average			RWA	Average			RWA	Average			RWA
				EAD ³	PD	LGD		PD	LGD	EAD ³		PD	LGD	PD	
0.00 to 0.01	0	AAA/Aaa	22	\$ 11,572	—	% 67.16	% \$ 25	0.22	%	\$ 11,768	—	% 65.37	% \$ 26	0.22	%
0.01 to 0.03	1A	AA+/Aa1	23	24,636	0.03	1.79	71	0.29		19,632	0.03	2.42	70	0.36	
0.03 to 0.03	1B	AA/Aa2	24	22,145	0.03	3.35	216	0.98		16,154	0.03	3.16	166	1.03	
0.03 to 0.04	1C	AA-/Aa3	25	14,306	0.04	13.90	810	5.66		15,917	0.04	12.68	825	5.18	
0.04 to 0.05	2A	A+/A1	26	18,504	0.05	11.26	875	4.73		14,968	0.05	13.98	854	5.71	
0.05 to 0.07	2B	A/A2	27	9,406	0.06	26.39	1,233	13.11		11,649	0.06	19.23	1,166	10.01	
0.07 to 0.09	2C	A-/A3	28	27,113	0.07	9.71	1,419	5.23		19,169	0.07	13.15	1,322	6.90	
0.09 to 0.11	3A	BBB+/Baa1	29	28,349	0.09	18.26	3,351	11.82		32,974	0.09	15.24	3,239	9.82	
0.11 to 0.16	3B	BBB/Baa2	30	31,741	0.12	17.28	4,390	13.83		32,268	0.12	16.49	4,268	13.23	
0.16 to 0.22	3C	BBB-/Baa3	31	26,712	0.16	21.71	5,583	20.90		22,459	0.16	22.34	4,766	21.22	
Non-Investment Grade															
0.22 to 0.32	4A	BB+/Ba1	32	26,182	0.23	13.29	3,983	15.21		24,409	0.23	14.68	4,138	16.95	
0.32 to 0.48	4B	BB/Ba2	33	15,802	0.32	24.53	4,812	30.45		14,943	0.32	27.25	5,041	33.73	
0.48 to 0.74	4C	BB-/Ba3	34	10,241	0.49	25.20	3,999	39.05		11,129	0.49	23.65	4,044	36.34	
0.74 to 1.12	5A	B+/B1	35	7,014	0.74	28.99	3,815	54.39		7,048	0.74	28.93	3,847	54.58	
1.12 to 2.39	5B	B/B2	36	8,768	1.13	32.80	6,099	69.56		8,333	1.13	33.14	5,920	71.04	
2.39 to 10.81	5C	B-/B3	37	20,410	2.39	15.94	8,546	41.87		20,268	2.40	15.45	8,249	40.70	
Watch and Classified															
10.81 to 20.32	6	CCC+/Caa1	38	966	10.81	34.41	1,429	147.93		1,123	10.81	39.00	1,876	167.05	
20.32 to 44.71	7	to	39	1,613	20.32	31.11	2,605	161.50		1,541	20.32	29.06	2,354	152.76	
44.71 to 99.99	8	CC/Ca	40	207	44.72	46.56	481	232.37		215	44.72	48.40	518	240.93	
Impaired/Default															
100.00	9	D	41	180	100.00	47.39	377	209.44		197	100.00	49.10	452	229.44	
Total			42	\$ 305,867	0.54	% 17.56	% \$ 54,119	17.69	%	\$ 286,164	0.58	% 18.25	% \$ 53,141	18.57	%

¹ PD ranges were revised to reflect non-retail parameter updates in the third quarter of 2018.

² Borrower Risk Rating (BRR).

³ EAD includes the effects of credit risk mitigation.

Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign

(\$ millions, except as noted)
As at

(\$ millions, except as noted) As at			LINE #	2018 Q3					2018 Q2					2018 Q1				
PD Range ¹ Investment Grade (%)	Internal ratings grade (BRR)	External rating equivalent		EAD ²	Average PD	Average LGD	RWA	Average risk weighting	EAD ²	Average PD	Average LGD	RWA	Average risk weighting	EAD ²	Average PD	Average LGD	RWA	Average risk weighting
0.00 to 0.01	0	AAA/Aaa	1	\$ 183,776	—	% 13.24	% \$ 89	0.05	% \$ 181,641	—	% 13.59	% \$ 74	0.04	% \$ 195,079	—	% 15.14	% \$ 72	0.04
0.01 to 0.03	1A	AA+/Aa1	2	9,912	0.01	2.98	59	0.60	9,641	0.01	2.67	52	0.54	9,789	0.01	2.54	50	0.51
0.03 to 0.03	1B	AA/Aa2	3	12,361	0.03	2.87	91	0.74	16,367	0.03	2.16	97	0.59	15,008	0.03	2.72	95	0.63
0.03 to 0.04	1C	AA-/Aa3	4	17,530	0.04	1.80	143	0.82	15,507	0.04	1.67	120	0.77	16,353	0.04	1.55	120	0.73
0.04 to 0.05	2A	A+/A1	5	7,688	0.04	2.85	61	0.79	9,082	0.05	2.29	58	0.64	13,751	0.05	1.89	72	0.52
0.05 to 0.07	2B	A/A2	6	2,319	0.05	3.05	30	1.29	3,256	0.06	2.23	30	0.92	2,667	0.06	2.71	29	1.09
0.07 to 0.09	2C	A-/A3	7	1,076	0.07	3.84	34	3.16	1,497	0.07	2.48	30	2.00	1,316	0.07	2.82	30	2.28
0.09 to 0.11	3A	BBB+/Baa1	8	305	0.09	7.33	15	4.92	465	0.09	5.91	17	3.66	702	0.09	5.47	21	2.99
0.11 to 0.15	3B	BBB/Baa2	9	1,127	0.11	4.42	23	2.04	1,163	0.12	3.19	17	1.46	1,909	0.12	3.31	29	1.52
0.15 to 0.22	3C	BBB-/Baa3	10	224	0.16	2.98	6	2.68	226	0.16	3.38	7	3.10	261	0.16	6.51	12	4.60
Non-Investment Grade																		
0.22 to 0.31	4A	BB+/Ba1	11	18	0.22	12.65	2	11.11	2	0.23	23.82	—	—	—	—	—	—	—
0.31 to 0.47	4B	BB/Ba2	12	21	0.30	—	—	—	—	—	—	—	—	21	0.30	6.00	1	4.80
0.47 to 0.72	4C	BB-/Ba3	13	116	0.47	0.89	1	0.86	121	0.49	2.74	4	3.31	12	0.49	56.00	8	66.67
0.72 to 1.10	5A	B+/B1	14	—	—	—	—	—	3	0.74	6.11	—	—	—	—	—	—	—
1.10 to 2.34	5B	B/B2	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2.34 to 10.63	5C	B-/B3	16	2	2.35	12.85	—	—	1	2.39	13.50	—	—	—	—	—	—	—
Watch and Classified																		
10.63 to 19.81	6	CCC+/Caa1	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19.81 to 45.45	7	to	18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
45.45 to 99.99	8	CC/Ca	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Impaired/Default																		
100.00	9	D	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total			21	\$ 236,475	0.01	% 10.88	% \$ 554	0.23	% \$ 238,972	0.01	% 10.86	% \$ 506	0.21	% \$ 256,868	0.01	% 12.05	% \$ 539	0.21

			2017 Q4					2017 Q3							
PD Range ¹ Investment Grade (%)	Internal ratings grade (BRR)	External rating equivalent		2017 Q4				2017 Q3							
				EAD ²	Average PD	Average LGD	RWA	Average risk weighting	EAD ²	Average PD	Average LGD	RWA	Average risk weighting		
0.00 to 0.01	0	AAA/Aaa	22	\$ 205,476	—	% 14.83	% \$ 69	0.03	%	\$ 197,158	—	% 16.21	% \$ 65	0.03	%
0.01 to 0.03	1A	AA+/Aa1	23	9,866	0.01	2.63	53	0.54		10,186	0.01	2.56	55	0.54	
0.03 to 0.03	1B	AA/Aa2	24	12,956	0.03	2.63	102	0.79		16,563	0.03	2.60	101	0.61	
0.03 to 0.04	1C	AA-/Aa3	25	14,854	0.04	1.60	115	0.77		12,677	0.04	1.58	88	0.69	
0.04 to 0.05	2A	A+/A1	26	7,719	0.05	3.00	66	0.86		10,438	0.05	2.50	93	0.89	
0.05 to 0.07	2B	A/A2	27	8,397	0.06	1.13	39	0.46		10,617	0.06	1.49	53	0.50	
0.07 to 0.09	2C	A-/A3	28	1,406	0.07	2.42	28	1.99		1,265	0.07	2.70	28	2.21	
0.09 to 0.11	3A	BBB+/Baa1	29	389	0.09	5.33	15	3.86		229	0.09	7.34	14	6.11	
0.11 to 0.16	3B	BBB/Baa2	30	1,492	0.12	3.27	22	1.47		1,104	0.12	6.17	32	2.90	
0.16 to 0.22	3C	BBB-/Baa3	31	209	0.16	3.27	6	2.87		208	0.16	5.58	9	4.33	
Non-Investment Grade															
0.22 to 0.32	4A	BB+/Ba1	32	—	—	—	—	—		7	0.23	9.54	—	—	
0.32 to 0.48	4B	BB/Ba2	33	20	0.30	3.30	1	5.00		24	0.32	24.84	5	20.83	
0.48 to 0.74	4C	BB-/Ba3	34	—	—	—	—	—		—	—	—	—	—	
0.74 to 1.12	5A	B+/B1	35	2	0.74	56.00	1	50.00		10	0.74	56.00	8	80.00	
1.12 to 2.39	5B	B/B2	36	—	—	—	—	—		—	—	—	—	—	
2.39 to 10.81	5C	B-/B3	37	—	—	—	—	—		—	—	—	—	—	
Watch and Classified															
10.81 to 20.32	6	CCC+/Caa1	38	—	—	—	—	—		—	—	—	—	—	
20.32 to 44.71	7	to	39	—	—	—	—	—		—	—	—	—	—	
44.71 to 99.99	8	CC/Ca	40	—	—	—	—	—		—	—	—	—	—	
Impaired/Default															
100.00	9	D	41	—	—	—	—	—		—	—	—	—	—	
Total			42	\$ 262,786	0.01	% 12.08	% \$ 517	0.20	%	\$ 260,486	0.01	% 12.83	% \$ 551	0.21	%

¹ PD ranges were revised to reflect non-retail parameter updates in the third quarter of 2018.

² EAD includes the effects of credit risk mitigation.

Non-Retail Advanced IRB Exposures – By Obligor Grade – Bank

(\$ millions, except as noted)
As at

\$ millions, except as noted) As at			LINE #	2018 Q3						2018 Q2						2018 Q1					
PD Range ¹	Internal ratings grade (BRR)	External rating equivalent		EAD ²	Average PD	Average LGD	RWA	Average risk weighting	EAD ²	Average PD	Average LGD	RWA	Average risk weighting	EAD ²	Average PD	Average LGD	RWA	Average risk weighting			
0.00 to 0.01	0	AAA/Aaa	1	\$ 949	—	12.99	% \$ —	—	\$ 795	—	13.48	% \$ —	—	\$ 717	—	13.48	% \$ —	—			
0.01 to 0.03	1A	AA+/Aa1	2	189	0.03	10.50	7	3.70	—	—	—	—	—	—	—	—	—	—			
0.03 to 0.03	1B	AA/Aa2	3	1,012	0.03	4.13	7	0.69	1,150	0.03	8.68	15	1.30	1,656	0.03	9.42	22	1.33			
0.03 to 0.04	1C	AA-/Aa3	4	18,618	0.04	22.20	1,084	5.82	14,739	0.04	23.00	1,047	7.10	15,741	0.04	18.57	883	5.61			
0.04 to 0.05	2A	A+/A1	5	48,286	0.04	13.95	2,114	4.38	47,793	0.05	13.95	2,169	4.54	52,147	0.05	11.61	1,872	3.59			
0.05 to 0.07	2B	A/A2	6	14,679	0.05	17.72	827	5.63	14,939	0.06	18.38	925	6.19	15,681	0.06	18.36	992	6.33			
0.07 to 0.09	2C	A-/A3	7	3,734	0.07	20.01	199	5.33	6,601	0.07	19.73	410	6.21	6,118	0.07	23.69	476	7.78			
0.09 to 0.11	3A	BBB+/Baa1	8	6,483	0.09	14.40	477	7.36	5,893	0.09	13.81	431	7.31	6,343	0.09	12.87	441	6.95			
0.11 to 0.15	3B	BBB/Baa2	9	2,135	0.11	8.61	110	5.15	2,795	0.12	8.51	145	5.19	2,435	0.12	8.03	126	5.17			
0.15 to 0.22	3C	BBB-/Baa3	10	2,508	0.16	9.69	155	6.18	2,332	0.16	10.32	161	6.90	2,412	0.16	9.70	160	6.63			
Non-Investment Grade																					
0.22 to 0.31	4A	BB+/Ba1	11	706	0.22	5.74	47	6.66	1,016	0.23	4.05	42	4.13	409	0.23	9.10	36	8.80			
0.31 to 0.47	4B	BB/Ba2	12	108	0.31	12.82	15	13.89	88	0.32	7.37	6	6.82	92	0.32	3.35	3	3.26			
0.47 to 0.72	4C	BB-/Ba3	13	184	0.47	12.26	32	17.39	212	0.49	15.49	47	22.17	278	0.49	13.55	55	19.78			
0.72 to 1.10	5A	B+/B1	14	3	0.72	11.17	—	—	1	0.74	13.14	—	—	2	0.74	44.77	2	100.00			
1.10 to 2.34	5B	B/B2	15	1	1.10	0.21	—	—	2	1.13	17.78	1	50.00	6	1.13	10.08	1	16.67			
2.34 to 10.63	5C	B-/B3	16	294	2.35	48.09	284	96.60	262	2.39	55.47	292	111.45	142	2.39	52.97	156	109.86			
Watch and Classified																					
10.63 to 19.81	6	CCC+/Caa1	17	1	10.63	24.72	1	100.00	—	—	—	—	—	—	—	—	—	—			
19.81 to 45.45	7	to	18	4	19.81	7.19	2	50.00	4	20.32	7.93	2	50.00	4	20.32	5.56	1	25.00			
45.45 to 99.99	8	CC/Ca	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Impaired/Default																					
100.00	9	D	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Total			21	\$ 99,894	0.06	% 16.00	% \$ 5,361	5.37	\$ 98,622	0.07	% 16.05	% \$ 5,693	5.77	\$ 104,183	0.06	% 14.36	% \$ 5,226	5.02			

			2017 Q4						2017 Q3													
PD Range ¹ Investment Grade (%)	Internal ratings grade (BRR)	External rating equivalent																				
			EAD ²	Average PD	Average LGD	RWA	Average risk weighting		EAD ²	Average PD	Average LGD	RWA	Average risk weighting									
0.00 to 0.01	0	AAA/Aaa	22	\$ 478	—	% 13.48	% \$ —	—	% \$ 442	—	% 13.49	% \$ —	—	% —	—							
0.01 to 0.03	1A	AA+/Aa1	23	—	—	—	—	—	—	—	—	—	—	—								
0.03 to 0.03	1B	AA/Aa2	24	606	0.03	2.27	4	0.66	1,091	0.03	1.57	5	0.46									
0.03 to 0.04	1C	AA-/Aa3	25	12,286	0.04	22.24	880	7.16	9,020	0.04	21.28	629	6.97									
0.04 to 0.05	2A	A+/A1	26	41,973	0.05	13.82	1,881	4.48	38,539	0.05	14.92	1,885	4.89									
0.05 to 0.07	2B	A/A2	27	23,102	0.06	12.02	939	4.06	24,028	0.06	11.15	945	3.93									
0.07 to 0.09	2C	A-/A3	28	5,797	0.07	11.95	274	4.73	5,990	0.07	11.51	282	4.71									
0.09 to 0.11	3A	BBB+/Baa1	29	4,533	0.09	12.64	290	6.40	4,615	0.09	11.38	288	6.24									
0.11 to 0.16	3B	BBB-/Baa2	30	2,472	0.12	7.98	130	5.26	2,001	0.12	8.59	110	5.50									
0.16 to 0.22	3C	BBB-/Baa3	31	1,864	0.16	9.27	117	6.28	2,221	0.16	6.30	105	4.73									
Non-Investment Grade																						
0.22 to 0.32	4A	BB+/Ba1	32	691	0.23	8.50	58	8.39	564	0.23	9.01	49	8.69									
0.32 to 0.48	4B	BB/Ba2	33	299	0.32	11.35	39	13.04	391	0.32	9.41	43	11.00									
0.48 to 0.74	4C	BB-/Ba3	34	68	0.49	17.73	17	25.00	50	0.49	25.05	18	36.00									
0.74 to 1.12	5A	B+/B1	35	2	0.74	32.41	1	50.00	2	0.74	45.96	2	100.00									
1.12 to 2.39	5B	B/B2	36	6	1.13	10.76	2	33.33	5	1.13	14.87	2	40.00									
2.39 to 10.81	5C	B-/B3	37	3	2.39	36.32	3	100.00	6	2.40	50.29	6	100.00									
Watch and Classified																						
10.81 to 20.32	6	CCC+/Caa1	38	—	—	—	—	—	—	—	—	—	—									
20.32 to 44.71	7	to	39	1	20.32	21.52	1	100.00	1	20.32	21.15	1	100.00									
44.71 to 99.99	8	CC/Ca	40	—	—	—	—	—	—	—	—	—	—									
Impaired/Default																						
100.00	9	D	41	—	—	—	—	—	—	—	—	—	—									
Total			42	\$ 94,181	0.06	% 13.94	% \$ 4,636	4.92	% \$ 88,966	0.06	% 13.55	% \$ 4,370	4.91	%								

¹ PD ranges were revised to reflect non-retail parameter updates in the third quarter of 2018.

² EAD includes the effects of credit risk mitigation.

Standardized Credit Risk Exposures¹

(\$ millions) As at		LINE #	2018 Q3								2018 Q2							
			Risk-weight								Risk-weight							
			0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total
By Counterparty Type																		
Retail																		
Residential secured		1	\$ -	\$ 10	\$ 1,670	\$ -	\$ 1,280	\$ 20	\$ -	\$ 2,980	\$ -	\$ 11	\$ 1,661	\$ -	\$ 1,103	\$ 20	\$ -	\$ 2,795
Other retail ²		2	351	193	-	-	11,952	-	180	12,676	340	176	-	-	17,822	-	323	18,661
		3	351	203	1,670	-	13,232	20	180	15,656	340	187	1,661	-	18,925	20	323	21,456
Non-retail																		
Corporate		4	10,268	1,547	-	-	-	116,789	195	128,799	10,527	1,299	-	-	-	114,358	192	126,376
Sovereign		5	54,533	39,386	-	-	-	-	-	93,919	60,519	37,915	-	-	-	-	-	98,434
Bank		6	-	17,361	-	-	-	-	-	17,361	-	17,566	-	-	-	-	-	17,566
		7	64,801	58,294	-	-	-	116,789	195	240,079	71,046	56,780	-	-	-	114,358	192	242,376
Total		8	\$ 65,152	\$ 58,497	\$ 1,670	\$ -	\$ 13,232	\$ 116,809	\$ 375	\$ 255,735	\$ 71,386	\$ 56,967	\$ 1,661	\$ -	\$ 18,925	\$ 114,378	\$ 515	\$ 263,832

			2018 Q1								2017 Q4							
			Risk-weight								Risk-weight							
			0%	20%	35%	50%	75%	100%	150%	Total	0%	20%	35%	50%	75%	100%	150%	Total
By Counterparty Type																		
Retail																		
Residential secured		9	\$ -	\$ 12	\$ 1,643	\$ -	\$ 1,049	\$ 21	\$ -	\$ 2,725	\$ -	\$ 13	\$ 4,719	\$ -	\$ 1,107	\$ 23	\$ -	\$ 5,862
Other retail ²		10	583	150	-	-	17,899	-	345	18,977	411	131	-	-	18,089	-	380	19,011
		11	583	162	1,643	-	18,948	21	345	21,702	411	144	4,719	-	19,196	23	380	24,873
Non-retail																		
Corporate		12	10,657	1,212	-	-	-	108,478	173	120,520	10,608	1,333	-	-	-	113,425	205	125,571
Sovereign		13	53,859	34,940	-	-	-	-	-	88,799	56,063	35,504	-	-	-	-	-	91,567
Bank		14	-	17,297	-	-	-	-	-	17,297	-	18,195	-	-	-	-	-	18,195
		15	64,516	53,449	-	-	-	108,478	173	226,616	66,671	55,032	-	-	-	113,425	205	235,333
Total		16	\$ 65,099	\$ 53,611	\$ 1,643	\$ -	\$ 18,948	\$ 108,499	\$ 518	\$ 248,318	\$ 67,082	\$ 55,176	\$ 4,719	\$ -	\$ 19,196	\$ 113,448	\$ 585	\$ 260,206

			2017 Q3							
			Risk-weight							
			0%	20%	35%	50%	75%	100%	150%	Total
By Counterparty Type										
Retail										
Residential secured		17	\$ -	\$ 110	\$ 183	\$ -	\$ 1,071	\$ 24	\$ -	\$ 1,388
Other retail ²		18	498	110	-	-	17,733	-	400	18,741
		19	498	220	183	-	18,804	24	400	20,129
Non-retail										
Corporate		20	10,715	1,270	-	-	-	107,266	202	119,453
Sovereign		21	55,817	24,574	-	-	-	-	-	80,391
Bank		22	115	16,820	-	1	-	-	-	16,936
		23	66,647	42,664	-	1	-	107,266	202	216,780
Total		24	\$ 67,145	\$ 42,884	\$ 183	\$ 1	\$ 18,804	\$ 107,290	\$ 602	\$ 236,909

¹ Credit risk exposures are after credit risk mitigants and net of counterparty-specific allowance.

² Under the Standardized approach, "Other retail" includes qualifying revolving retail (QRR) exposures.

AIRB Credit Risk Exposures: Undrawn Commitments and EAD on Undrawn Commitments^{1,2}

(\$ millions) As at		2018 Q3		2018 Q2		2018 Q1	
By Counterparty Type	LINE #	Notional undrawn commitments	EAD on undrawn commitments	Notional undrawn commitments	EAD on undrawn commitments	Notional undrawn commitments	EAD on undrawn commitments
Retail							
Residential secured	1	\$ 96,930	\$ 50,964	\$ 94,873	\$ 49,586	\$ 92,757	\$ 48,802
Qualifying revolving retail	2	128,498	79,968	102,176	68,246	98,743	70,258
Other retail	3	11,072	6,515	10,732	6,353	10,664	6,364
	4	236,500	137,447	207,781	124,185	202,164	125,424
Non-retail							
Corporate	5	83,786	57,098	78,818	54,465	73,341	50,581
Sovereign	6	1,763	1,206	1,773	1,229	1,657	1,148
Bank	7	2,978	2,037	2,400	1,663	1,656	1,148
	8	88,527	60,341	82,991	57,357	76,654	52,877
Total	9	\$ 325,027	\$ 197,788	\$ 290,772	\$ 181,542	\$ 278,818	\$ 178,301

		2017 Q4		2017 Q3	
By Counterparty Type		Notional undrawn commitments	EAD on undrawn commitments	Notional undrawn commitments	EAD on undrawn commitments
Retail					
Residential secured	10	\$ 91,182	\$ 48,240	\$ 88,864	\$ 46,848
Qualifying revolving retail	11	98,146	71,141	97,942	70,732
Other retail	12	10,529	6,259	10,122	6,055
	13	199,857	125,640	196,928	123,635
Non-retail					
Corporate	14	70,921	48,872	68,788	47,335
Sovereign	15	1,500	1,039	1,391	964
Bank	16	1,017	705	1,019	706
	17	73,438	50,616	71,198	49,005
Total	18	\$ 273,295	\$ 176,256	\$ 268,126	\$ 172,640

¹ Notional undrawn commitments are equal to the contractually available amounts provided via committed loan agreements less amounts currently outstanding under those committed loan agreements.

² EAD on undrawn commitments is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

AIRB Credit Risk Exposures: Loss Experience

(Percentage)	LINE #	2018 Q3		2018 Q2		2018 Q1		2017 Q4			2017 Q3	
		Actual loss rate ^{1,2}	Expected loss rate ^{1,2}	Actual loss rate ^{1,2}	Expected loss rate ^{1,2}	Actual loss rate ^{1,2}	Expected loss rate ^{1,2}	Historical actual loss rate ³	Actual loss rate ^{1,2}	Expected loss rate ^{1,2}	Actual loss rate ^{1,2}	Expected loss rate ^{1,2}
By Counterparty Type												
Retail												
Residential secured	1	0.02 %	0.10 %	0.02 %	0.11 %	0.02 %	0.11 %	0.03 %	0.02 %	0.11 %	0.01 %	0.06 %
Qualifying revolving retail	2	2.88	3.85	2.79	3.85	2.49	3.63	3.31	2.37	3.65	2.16	3.04
Other retail	3	1.03	1.37	1.02	1.30	0.86	1.21	1.05	0.76	1.19	0.95	1.14
Non-retail												
Corporate	4	(0.05)	0.49	(0.03)	0.53	(0.01)	0.53	0.21	(0.02)	0.61	(0.01)	0.63
Sovereign	5	—	—	—	—	—	—	—	—	—	—	—
Bank	6	—	0.03	—	0.04	—	0.04	—	—	0.03	—	0.03

¹ Retail actual and expected loss rates are measured as follows:

Actual loss rate represents the actual write-offs net of recoveries for the current and prior three quarters divided by the outstanding balances taken at the beginning of the four-quarter period starting 15 months ago. This reflects the three-month lag between the definition of default (at 90 days past due) and write-off (at 180 days past due). Expected loss rate represents the loss rate that was predicted at the beginning of the four-quarter period defined above. The expected loss is measured using credit risk parameters (PD x LGD x EAD) divided by outstanding balances at the beginning of the four-quarter period.

² Non-retail actual and expected loss rates are measured as follows:

Actual loss rate represents the change in counterparty-specific allowance plus write-offs less recoveries, divided by the outstanding balances for the same period, for each of the current and prior three quarters. Expected loss rate represents the loss rate that was predicted at the beginning of the applicable four-quarter period defined above. The expected loss is measured using credit risk parameters (PD x LGD x EAD) divided by outstanding balances at the beginning of the four-quarter period.

³ The historical loss rate equals total actual losses for all years in the historically measured period divided by total outstanding balances for all years in the historically measured period. Currently, the Bank includes comparable data from fiscal 2002 through to the current year in the historically measured period. This historical data will be updated annually until a complete business cycle is included in the historically measured period. A business cycle is estimated to be 10 to 15 years in duration.

Commentary:

Differences between actual loss rates and expected loss rates are due to the following reasons:

- Expected losses are calculated using "through the cycle" risk parameters while actual losses are determined at a "point in time" and reflect economic conditions at that time. Using "through the cycle" parameters has the effect of stabilizing expected losses over a longer period of time. As a result, actual losses may exceed expected losses during a recession and may fall below expected losses during economic growth.
- Expected loss parameters are conservatively estimated (that is, adjusted upwards) to account for the limited number of years of historical data available.
- LGD parameters used in the expected loss estimates are adjusted upwards to reflect potential economic downturn conditions.

To ensure the Bank's models and risk parameters continue to be reasonable predictors of potential loss, the Bank assesses and reviews its risk parameters against actual loss experience and public sources of information at least annually and the Bank's models are updated as required.

Retail:

Actual loss rates are below the expected loss rates and is a reflection of prudent assumptions and good quality of originations.

Non-retail:

Actual loss rates for non-retail exposures remain below the historically measured period. This is because of lower average default rates during these quarters than they were during the historically measured period.

AIRB Credit Risk Exposures: Actual and Estimated Parameters

(Percentage) As at		LINE #	2018 Q3						2018 Q2					
			Average Estimated PD ¹	Actual Default Rate	Average Estimated LGD ²	Actual LGD ³	Average Estimated EAD	Actual EAD	Average Estimated PD ¹	Actual Default Rate	Average Estimated LGD ²	Actual LGD ³	Average Estimated EAD	Actual EAD
Retail														
Residential secured uninsured	1		0.62 %	0.38 %	28.83 %	12.73 %	95.94 %	100.68 %	0.64 %	0.39 %	29.47 %	14.29 %	96.28 %	98.38 %
Residential secured insured ⁴	2		0.43	0.26	n/a	n/a	99.34	99.36	0.45	0.26	n/a	n/a	99.40	99.34
Qualifying revolving retail	3		2.51	3.02	88.53	80.33	97.95	94.68	1.54	1.47	87.17	79.89	92.53	90.09
Other retail	4		2.47	1.98	53.39	45.08	99.30	91.35	2.47	2.01	53.21	45.38	99.28	91.01
Non-Retail														
Corporate	5		1.21	0.31	17.91	24.35	90.65	56.36	1.24	0.32	17.64	24.06	91.27	53.33
Sovereign	6		0.09	—	10.88	n/a	99.71	n/a	0.11	—	10.86	n/a	99.72	n/a
Bank	7		0.21	—	16.00	n/a	96.94	n/a	0.19	—	16.05	n/a	97.49	n/a
			2018 Q1						2017 Q4					
			Average Estimated PD ¹	Actual Default Rate	Average Estimated LGD ²	Actual LGD ³	Average Estimated EAD	Actual EAD	Average Estimated PD ¹	Actual Default Rate	Average Estimated LGD ²	Actual LGD ³	Average Estimated EAD	Actual EAD
Retail														
Residential secured uninsured	8		0.66 %	0.40 %	29.42 %	15.48 %	96.41 %	97.45 %	0.66 %	0.41 %	29.38 %	15.35 %	96.49 %	96.92 %
Residential secured insured ⁴	9		0.60	0.29	n/a	n/a	99.37	99.34	0.59	0.31	n/a	n/a	99.35	99.29
Qualifying revolving retail	10		1.60	1.49	86.69	80.15	92.96	90.58	1.55	1.47	86.56	78.38	93.05	91.12
Other retail	11		2.44	2.06	50.98	43.51	99.28	90.72	2.35	2.12	50.56	42.07	99.22	91.05
Non-Retail														
Corporate	12		1.22	0.35	17.84	23.97	91.35	81.20	1.19	0.41	17.56	21.54	91.53	54.65
Sovereign	13		0.11	—	12.04	—	99.74	n/a	0.08	—	12.08	n/a	99.78	n/a
Bank	14		0.18	—	14.36	—	98.43	n/a	0.17	—	13.94	n/a	98.78	n/a
			2017 Q3											
			Average Estimated PD ¹	Actual Default Rate	Average Estimated LGD ²	Actual LGD ³	Average Estimated EAD	Actual EAD						
Retail														
Residential secured uninsured	15		0.63 %	0.43 %	29.43 %	14.24 %	96.63 %	97.21 %						
Residential secured insured ⁴	16		0.61	0.34	n/a	n/a	99.31	99.41						
Qualifying revolving retail	17		1.52	1.60	86.18	79.33	93.01	88.88						
Other retail	18		2.27	2.12	50.94	42.20	99.15	91.15						
Non-Retail														
Corporate	19		1.19	0.47	18.25	16.90	91.43	58.54						
Sovereign	20		0.08	—	12.83	—	99.77	n/a						
Bank	21		0.17	—	13.55	—	98.83	n/a						

¹ Estimated PD reflects a one-year through-the-cycle time horizon and is based on long run economic conditions.

² Estimated LGD reflects loss estimates for the full portfolio under a severe downturn economic scenario.

³ Represents average LGD of the impaired portfolio over trailing 12 months.

⁴ LGD for the residential secured insured portfolio is n/a due to the effect of credit risk mitigation from government backed entities.

Exposures Covered By Credit Risk Mitigation

(\$ millions) As at		LINE #	2018 Q3			2018 Q2			2018 Q1		
			Standardized			Standardized			Standardized		
			Eligible financial collateral ²	Guarantees / credit derivatives	AIRB ¹ Guarantees / credit derivatives	Eligible financial collateral ²	Guarantees / credit derivatives	AIRB ¹ Guarantees / credit derivatives	Eligible financial collateral ²	Guarantees / credit derivatives	AIRB ¹ Guarantees / credit derivatives
By Counterparty Type											
Retail											
Residential secured		1	\$ —	\$ 11	\$ 110,977	\$ —	\$ 11	\$ 114,549	\$ —	\$ 12	\$ 117,662
Qualifying revolving retail		2	—	—	—	—	—	—	—	—	—
Other retail		3	351	193	—	340	176	—	583	150	—
		4	351	204	110,977	340	187	114,549	583	162	117,662
Non-retail											
Corporate		5	1,667	10,147	15,705	1,689	10,137	15,558	2,023	9,846	15,180
Sovereign		6	—	—	196	—	—	191	—	—	205
Bank		7	—	—	992	—	—	817	—	—	738
		8	1,667	10,147	16,893	1,689	10,137	16,566	2,023	9,846	16,123
Gross Credit Risk Exposure		9	\$ 2,018	\$ 10,351	\$ 127,870	\$ 2,029	\$ 10,324	\$ 131,115	\$ 2,606	\$ 10,008	\$ 133,785

			2017 Q4			2017 Q3		
			Standardized			Standardized		
			Eligible financial collateral ²	Guarantees / credit derivatives	AIRB ¹ Guarantees / credit derivatives	Eligible financial collateral ²	Guarantees / credit derivatives	AIRB ¹ Guarantees / credit derivatives
By Counterparty Type								
Retail								
Residential secured		10	\$ —	\$ 13	\$ 121,336	\$ —	\$ 110	\$ 124,431
Qualifying revolving retail		11	—	—	—	—	—	—
Other retail		12	411	131	—	498	110	—
		13	411	144	121,336	498	220	124,431
Non-retail								
Corporate		14	2,132	9,810	14,740	2,315	9,670	14,895
Sovereign		15	—	—	186	—	—	108
Bank		16	—	—	500	—	115	464
		17	2,132	9,810	15,426	2,315	9,785	15,467
Gross Credit Risk Exposure		18	\$ 2,543	\$ 9,954	\$ 136,762	\$ 2,813	\$ 10,005	\$ 139,898

¹ For exposures under the AIRB approach, eligible financial collateral is taken into account in the Bank's LGD models. Separate disclosure of eligible financial collateral is, therefore, not required.

² For exposures under the Standardized approach, eligible financial collateral can include cash, gold, highly rated debt securities, and equities listed on the main index.

Derivatives – Notional

(\$ millions) As at		LINE #	2018 Q3						2018 Q2					
			Trading						Trading					
			Over-the-counter ¹						Over-the-counter ¹					
			Clearing house ²	Non- clearing house	Exchange- traded	Total	Non- trading	Total	Clearing house ²	Non- clearing house	Exchange- traded	Total	Non- trading	Total
Interest Rate Contracts														
Futures		1	\$ —	\$ —	\$ 965,006	\$ 965,006	\$ —	\$ 965,006	\$ —	\$ —	\$ 1,240,242	\$ 1,240,242	\$ —	\$ 1,240,242
Forward rate agreements		2	828,170	89,694	—	917,864	201	918,065	817,677	90,218	—	907,895	182	908,077
Swaps		3	7,248,333	450,204	—	7,698,537	1,399,687	9,098,224	7,186,042	476,198	—	7,662,240	1,371,796	9,034,036
Options written		4	—	60,547	109,636	170,183	242	170,425	—	47,537	49,175	96,712	223	96,935
Options purchased		5	—	58,626	121,267	179,893	3,507	183,400	—	42,055	59,169	101,224	3,739	104,963
		6	8,076,503	659,071	1,195,909	9,931,483	1,403,637	11,335,120	8,003,719	656,008	1,348,586	10,008,313	1,375,940	11,384,253
Foreign Exchange Contracts														
Futures		7	—	—	9	9	—	9	—	—	28	28	—	28
Forward contracts		8	—	1,672,277	—	1,672,277	31,235	1,703,512	—	1,662,841	—	1,662,841	32,658	1,695,499
Swaps		9	—	—	—	—	—	—	—	—	—	—	—	—
Cross-currency interest rate swaps		10	—	650,760	—	650,760	88,161	738,921	—	623,101	—	623,101	74,965	698,066
Options written		11	—	32,623	—	32,623	—	32,623	—	27,227	—	27,227	—	27,227
Options purchased		12	—	31,298	—	31,298	—	31,298	—	26,515	—	26,515	—	26,515
		13	—	2,386,958	9	2,386,967	119,396	2,506,363	—	2,339,684	28	2,339,712	107,623	2,447,335
Credit Derivative Contracts														
Credit default swaps														
Protection purchased		14	10,054	255	—	10,309	2,657	12,966	8,776	323	—	9,099	2,867	11,966
Protection sold		15	1,739	135	—	1,874	—	1,874	763	140	—	903	—	903
		16	11,793	390	—	12,183	2,657	14,840	9,539	463	—	10,002	2,867	12,869
Other Contracts														
Equity contracts		17	—	49,368	39,454	88,822	31,206	120,028	—	44,431	30,120	74,551	31,468	106,019
Commodity contracts		18	101	33,138	27,059	60,298	—	60,298	83	33,167	32,680	65,930	—	65,930
		19	101	82,506	66,513	149,120	31,206	180,326	83	77,598	62,800	140,481	31,468	171,949
Total		20	\$ 8,088,397	\$ 3,128,925	\$ 1,262,431	\$ 12,479,753	\$ 1,556,896	\$ 14,036,649	\$ 8,013,341	\$ 3,073,753	\$ 1,411,414	\$ 12,498,508	\$ 1,517,898	\$ 14,016,406
			2018 Q1						2017 Q4					
			Trading						Trading					
			Over-the-counter ¹						Over-the-counter ¹					
			Clearing house ²	Non- clearing house	Exchange- traded	Total	Non- trading	Total	Clearing house ²	Non- clearing house	Exchange- traded	Total	Non- trading	Total
Interest Rate Contracts														
Futures		21	\$ —	\$ —	\$ 912,680	\$ 912,680	\$ —	\$ 912,680	\$ —	\$ —	\$ 445,848	\$ 445,848	\$ —	\$ 445,848
Forward rate agreements		22	542,276	107,616	—	649,892	145	650,037	392,742	136,008	—	528,750	195	528,945
Swaps		23	5,913,608	488,357	—	6,401,965	1,237,184	7,639,149	5,534,758	506,189	—	6,040,947	1,336,421	7,377,368
Options written		24	—	31,758	57,487	89,245	228	89,473	—	17,629	90,214	107,843	292	108,135
Options purchased		25	—	26,829	74,252	101,081	1,482	102,563	—	13,163	112,087	125,250	1,535	126,785
		26	6,455,884	654,560	1,044,419	8,154,863	1,239,039	9,393,902	5,927,500	672,989	648,149	7,248,638	1,338,443	8,587,081
Foreign Exchange Contracts														
Futures		27	—	—	1	1	—	1	—	—	3	3	—	3
Forward contracts		28	—	1,425,216	—	1,425,216	25,463	1,450,679	—	1,457,790	—	1,457,790	27,162	1,484,952
Swaps		29	—	—	—	—	—	—	—	—	—	—	—	—
Cross-currency interest rate swaps		30	—	593,426	—	593,426	78,846	672,272	—	592,222	—	592,222	82,311	674,533
Options written		31	—	22,279	—	22,279	—	22,279	—	22,272	—	22,272	—	22,272
Options purchased		32	—	21,850	—	21,850	—	21,850	—	22,713	—	22,713	—	22,713
		33	—	2,062,771	1	2,062,772	104,309	2,167,081	—	2,094,997	3	2,095,000	109,473	2,204,473
Credit Derivative Contracts														
Credit default swaps														
Protection purchased		34	8,394	474	—	8,868	2,771	11,639	8,973	581	—	9,554	2,673	12,227
Protection sold		35	610	230	—	840	—	840	1,427	267	—	1,694	—	1,694
		36	9,004	704	—	9,708	2,771	12,479	10,400	848	—	11,248	2,673	13,921
Other Contracts														
Equity contracts		37	—	54,796	76,956	131,752	32,595	164,347	—	51,535	58,367	109,902	32,502	142,404
Commodity contracts		38	169	28,351	28,228	56,748	—	56,748	210	22,869	24,719	47,798	—	47,798
		39	169	83,147	105,184	188,500	32,595	221,095	210	74,404	83,086	157,700	32,502	190,202
Total		40	\$ 6,465,057	\$ 2,801,182	\$ 1,149,604	\$ 10,415,843	\$ 1,378,714	\$ 11,794,557	\$ 5,938,110	\$ 2,843,238	\$ 731,238	\$ 9,512,586	\$ 1,483,091	\$ 10,995,677

¹ Collateral held under a Credit Support Annex (CSA) to help reduce CCR is in the form of high quality and liquid assets such as cash and high quality government securities. Acceptable collateral is governed by the Collateralized Trading Policy.

² Derivatives executed through a central clearing house reduces settlement risk due to the ability to net settle offsetting positions for capital purposes and therefore receive preferential capital treatment compared to those settled with non-central clearing house counterparties.

Derivatives – Notional (Continued)

(\$ millions) As at	LINE #	2017 Q3									
		Trading									
		Over-the-counter ¹									
		Clearing house ²	Non- clearing house	Exchange- traded		Total		Non- trading		Total	
Interest Rate Contracts											
Futures	1	\$ —	\$ —	\$ 917,857	\$	917,857	\$	—	\$	917,857	
Forward rate agreements	2	379,757	128,271	—		508,028		179		508,207	
Swaps	3	5,308,908	482,129	—		5,791,037		1,370,365		7,161,402	
Options written	4	—	19,065	74,332		93,397		269		93,666	
Options purchased	5	—	18,176	91,836		110,012		1,274		111,286	
	6	5,688,665	647,641	1,084,025		7,420,331		1,372,087		8,792,418	
Foreign Exchange Contracts											
Futures	7	—	—	3		3		—		3	
Forward contracts	8	—	1,256,594	—		1,256,594		29,136		1,285,730	
Swaps	9	—	—	—		—		—		—	
Cross-currency interest rate swaps	10	—	559,791	—		559,791		77,473		637,264	
Options written	11	—	21,947	—		21,947		—		21,947	
Options purchased	12	—	22,030	—		22,030		—		22,030	
	13	—	1,860,362	3		1,860,365		106,609		1,966,974	
Credit Derivative Contracts											
Credit default swaps											
Protection purchased	14	4,785	686	—		5,471		2,264		7,735	
Protection sold	15	743	277	—		1,020		—		1,020	
	16	5,528	963	—		6,491		2,264		8,755	
Other Contracts											
Equity contracts	17	—	41,076	44,704		85,780		31,639		117,419	
Commodity contracts	18	261	27,721	20,554		48,536		—		48,536	
	19	261	68,797	65,258		134,316		31,639		165,955	
Total	20	\$ 5,694,454	\$ 2,577,763	\$ 1,149,286	\$	9,421,503	\$	1,512,599	\$	10,934,102	

¹ Collateral held under a CSA to help reduce CCR is in the form of high quality and liquid assets such as cash and high quality government securities. Acceptable collateral is governed by the Collateralized Trading Policy.

² Derivatives executed through a central clearing house reduces settlement risk due to the ability to net settle offsetting positions for capital purposes and therefore receive preferential capital treatment compared to those settled with non-central clearing house counterparties.

Derivatives – Credit Exposure

(\$ millions) As at			2018 Q3			2018 Q2			2018 Q1		
LINE #			Current replacement cost ¹	Credit equivalent amount	Risk-weighted amount	Current replacement cost ¹	Credit equivalent amount	Risk-weighted amount	Current replacement cost ¹	Credit equivalent amount	Risk-weighted amount
Interest Rate Contracts											
1	Forward rate agreements	\$	34	\$ 119	\$ 41	\$ 56	\$ 122	\$ 40	\$ 51	\$ 135	\$ 42
2	Swaps		12,114	16,065	4,613	12,742	16,749	5,188	12,440	16,480	5,475
3	Options purchased		490	723	313	426	625	272	341	466	218
4			12,638	16,907	4,967	13,224	17,496	5,500	12,832	17,081	5,735
Foreign Exchange Contracts											
5	Forward contracts		12,350	30,025	3,818	17,560	34,640	4,291	19,743	34,654	4,428
6	Swaps		63	—	—	49	—	—	—	—	—
7	Cross-currency interest rate swaps		18,861	37,380	6,503	20,504	38,120	6,989	23,715	40,512	7,384
8	Options purchased		381	925	202	359	846	200	447	813	176
9			31,655	68,330	10,523	38,472	73,606	11,480	43,905	75,979	11,988
Other Contracts											
10	Credit derivatives		4	345	136	5	308	119	4	310	128
11	Equity contracts		1,093	4,979	761	1,243	4,944	829	1,551	5,453	942
12	Commodity contracts		1,184	2,752	588	1,156	2,714	511	1,006	2,304	442
13			2,281	8,076	1,485	2,404	7,966	1,459	2,561	8,067	1,512
14	Total		46,574	93,313	16,975	54,100	99,068	18,439	59,298	101,127	19,235
15	Less: impact of master netting agreements		29,622	49,365	11,199	34,276	52,734	12,407	39,836	57,709	13,377
16	Total after netting		16,952	43,948	5,776	19,824	46,334	6,032	19,462	43,418	5,858
17	Less: impact of collateral		6,757	7,342	912	8,604	9,391	1,122	8,276	8,890	1,199
18	Net		10,195	36,606	4,864	11,220	36,943	4,910	11,186	34,528	4,659
19	Qualifying Central Counterparty (QCCP) contracts ²		3,170	16,704	1,871	3,409	17,062	2,688	2,163	14,676	2,189
20	Total		13,365	53,310	6,735	14,629	54,005	7,598	13,349	49,204	6,848

				2017 Q4			2017 Q3										
				Current replacement cost ¹		Credit equivalent amount		Risk-weighted amount		Current replacement cost ¹		Credit equivalent amount		Risk-weighted amount			
Interest Rate Contracts																	
Forward rate agreements				21	\$	22	\$	202	\$	86	\$	72	\$	225	\$	79	
Swaps				22		13,516		17,710		6,493		13,764		17,980		6,957	
Options purchased				23		370		433		167		374		443		188	
				24		13,908		18,345		6,746		14,210		18,648		7,224	
Foreign Exchange Contracts																	
Forward contracts				25		16,816		32,408		4,156		19,580		32,919		4,226	
Swaps				26		—		—		—		—		—		—	
Cross-currency interest rate swaps				27		20,388		37,415		7,041		24,093		40,636		7,785	
Options purchased				28		330		685		153		490		814		174	
				29		37,534		70,508		11,350		44,163		74,369		12,185	
Other Contracts																	
Credit derivatives				30		5		360		148		5		362		155	
Equity contracts				31		1,553		5,152		952		1,236		4,193		812	
Commodity contracts				32		645		1,779		371		618		1,906		376	
				33		2,203		7,291		1,471		1,859		6,461		1,343	
Total				34		53,645		96,144		19,567		60,232		99,478		20,752	
Less: impact of master netting agreements				35		36,522		54,970		13,606		43,138		60,320		14,947	
Total after netting				36		17,123		41,174		5,961		17,094		39,158		5,805	
Less: impact of collateral				37		6,889		7,672		1,141		6,703		7,730		1,301	
Net				38		10,234		33,502		4,820		10,391		31,428		4,504	
QCCP contracts ²				39		1,566		16,322		1,864		1,536		15,952		1,697	
Total				40	\$	11,800	\$	49,824	\$	6,684	\$	11,927	\$	47,380	\$	6,201	

¹ Non-trading credit derivatives, which are given financial guarantee treatment for credit risk capital purposes, were excluded in accordance with OSFI's guidelines.

² RWA for OSFI "deemed" QCCP derivative exposures are calculated in accordance with the Basel III regulatory framework, which takes into account both trade exposures and default fund exposures related to derivatives, and are presented based on the "all-in" methodology. The amounts calculated are net of master netting agreements and collateral.

On- and Off-Balance Sheet Loan Securitizations¹

(\$ millions)
As at

Residential mortgages securitized and sold to third parties^{2,3,4}

Balance at beginning of period

Securitized

Amortization⁵

Balance at end of period

Consumer instalment and other personal loans – HELOC and automobile loans^{6,7}

Balance at beginning of period

Securitized

Proceeds reinvested in securitizations⁸

Amortization

Balance at end of period

Gross impaired loans⁹

Write-offs net of recoveries⁹

Business and government loans²

Balance at beginning of period

Amortization

Balance at end of period

Credit card

Balance at beginning of period

Securitized

Proceeds reinvested in securitizations

Amortization

Foreign exchange

Balance at end of period

Write-offs net of recoveries⁹

Total loan securitizations

Mortgages securitized and retained²

Residential mortgages securitized and retained

LINE #	2018			2017		Year to Date		Full Year	
	Q3	Q2	Q1	Q4	Q3	2018	2017	2017	2016
1	\$ 24,135	\$ 24,436	\$ 24,985	\$ 25,434	\$ 26,460	\$ 24,985	\$ 26,742	\$ 26,742	\$ 30,211
2	11,708	1,647	2,061	2,256	2,105	15,416	6,649	8,905	8,393
3	(12,295)	(1,948)	(2,610)	(2,705)	(3,131)	(16,853)	(7,957)	(10,662)	(11,862)
4	23,548	24,135	24,436	24,985	25,434	23,548	25,434	24,985	26,742
5	2,452	2,484	2,481	2,449	2,462	2,481	3,642	3,642	3,642
6	–	–	–	–	–	–	–	–	–
7	258	326	343	350	399	927	1,488	1,838	2,172
8	(229)	(358)	(340)	(318)	(412)	(927)	(2,681)	(2,999)	(2,172)
9	2,481	2,452	2,484	2,481	2,449	2,481	2,449	2,481	3,642
10	12	10	10	10	11	32	11	10	16
11	–	–	–	–	–	–	1	1	–
12	1,304	1,348	1,428	1,514	1,554	1,428	1,664	1,664	1,828
13	(47)	(44)	(80)	(86)	(40)	(171)	(150)	(236)	(164)
14	1,257	1,304	1,348	1,428	1,514	1,257	1,514	1,428	1,664
15	2,825	3,198	3,354	2,493	2,730	3,354	2,012	2,012	–
16	976	770	–	774	–	1,746	671	1,445	1,944
17	4,842	4,328	5,200	4,323	4,000	14,370	11,448	15,771	5,162
18	(4,842)	(5,612)	(5,046)	(4,323)	(4,000)	(15,500)	(11,448)	(15,771)	(5,162)
19	37	141	(310)	87	(237)	(132)	(190)	(103)	68
20	3,838	2,825	3,198	3,354	2,493	3,838	2,493	3,354	2,012
21	\$ 16	\$ 15	\$ 16	\$ 13	\$ 12	\$ 47	\$ 41	\$ 54	\$ 20
22	\$ 31,124	\$ 30,716	\$ 31,466	\$ 32,248	\$ 31,890	\$ 31,124	\$ 31,890	\$ 32,248	\$ 34,060
23	\$ 35,077	\$ 35,791	\$ 37,699	\$ 31,761	\$ 32,093	\$ 35,077	\$ 32,093	\$ 31,761	\$ 33,859

¹ Disclosure relates to securitization activity undertaken by the Bank from a capital perspective and does not contemplate accounting treatment under IFRS.

² Balances are comprised of National Housing Act (NHA) Mortgage-Backed Security (MBS) which do not qualify as securitization exposures as defined by the Basel III regulatory framework.

³ All securitized residential mortgages are insured by CMHC or third-party insurance providers.

⁴ Exposures are considered sold where legal sale has occurred. Classification is not based on accounting treatment under IFRS.

⁵ Mark-to-market adjustments recorded during the period are included in amortization.

⁶ Certain HELOC and credit card structures are subject to early amortization provisions which, if triggered, would result in the repayment of the related asset backed securities from the collections of the securitized HELOC or credit card portfolio prior to the expected principal payment dates.

⁷ Since inception, no capital has been assessed for the Bank's early amortization provisions associated with the sellers' interest of the Bank's sponsored HELOC securitization vehicles because the early amortization triggers have not been breached.

⁸ Includes restricted cash reinvested to support the securitization structure.

⁹ Disclosure relates to loans qualifying as exposures securitized under the Basel III regulatory framework. The amount disclosed here is a subset of total loans included on the "Loans Managed" page. For further details, refer to page 15 of the Supplemental Financial Information package.

Standardized Charges for Securitization Exposures in the Trading Book

(\$ millions) As at		LINE #	2018 Q3		2018 Q2		2018 Q1						
			Gross securitization exposures		Risk- weighted assets		Gross securitization exposures		Risk- weighted assets				
Market Risk Capital Approach and Risk Weighting Internal Ratings Based ¹													
AA- and above	1	\$	677	\$	48	\$	692	\$	49	\$	548	\$	39
A+ to A-	2		9		1		12		1		23		2
BBB+ to BBB-	3		6		4		7		4		9		5
Below BB- ²	4		—		—		—		—		—		—
Unrated ³	5		—		—		—		—		—		—
Total	6	\$	692	\$	53	\$	711	\$	54	\$	580	\$	46
			2017 Q4		2017 Q3								
			Gross securitization exposures		Risk- weighted assets		Gross securitization exposures		Risk- weighted assets				
Market Risk Capital Approach and Risk Weighting Internal Ratings Based ¹													
AA- and above	7	\$	429	\$	30	\$	593	\$	42				
A+ to A-	8		3		—		3		—				
BBB+ to BBB-	9		7		4		—		—				
Below BB- ²	10		—		—		1		2				
Unrated ³	11		—		—		—		—				
Total	12	\$	439	\$	34	\$	597	\$	44				

¹ Securitization exposures subject to the market risk capital approach are comprised of securities held in the Bank's trading book with no resecuritization exposures.

² Securitization exposures are not deducted from capital and are included in the calculation of RWA, in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

³ Unrated gross securitization exposures include the notional value of collateralized debt obligations held by the Bank.

Securitization Exposures in the Trading Book

(\$ millions) As at		LINE #	2018 Q3	2018 Q2	2018 Q1		
Exposure Type			Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	
Collateralized debt obligations	1	\$	—	\$	—	\$	—
Asset backed securities							
Residential mortgage loans	2		—		—		—
Commercial mortgage loans	3		1		—		4
Credit card loans	4		206		190		104
Automobile loans and leases	5		433		426		422
Other	6		52		94		50
Total	7	\$	692	\$	711	\$	580
			2017 Q4	2017 Q3			
Exposure Type			Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	
Collateralized debt obligations	8	\$	—	\$	—	\$	—
Asset backed securities							
Residential mortgage loans	9		—		—		—
Commercial mortgage loans	10		11		7		—
Credit card loans	11		59		242		—
Automobile loans and leases	12		281		277		—
Other	13		88		71		—
Total	14	\$	439	\$	597	\$	—

¹ Primarily comprised of trading securities held by the Bank.

² Primarily comprised of the notional value of collateralized debt obligations held by the Bank.

Securitization Exposures in the Banking Book

(\$ millions) As at		LINE #	2018 Q3		2018 Q2		2018 Q1	
Exposure Type			Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²
Collateralized mortgage obligations		1	\$ 15,905	\$ —	\$ 14,458	\$ —	\$ 13,318	\$ —
Collateralized loan obligations		2	2,150	—	1,364	—	652	—
Asset backed securities								
Residential mortgage loans		3	1,923	6,325	712	8,239	790	8,458
Personal loans		4	12,815	—	12,134	—	12,579	—
Credit card loans		5	18,825	—	16,990	—	16,144	—
Automobile loans and leases		6	13,811	4,874	13,013	4,279	11,486	4,553
Equipment loans and leases		7	3,157	436	2,749	369	1,578	291
Trade receivables		8	2,200	143	1,614	102	2,194	102
Total		9	\$ 70,786	\$ 11,778	\$ 63,034	\$ 12,989	\$ 58,741	\$ 13,404

			2017 Q4		2017 Q3			
Exposure Type			Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²	Aggregate on-balance sheet exposures ¹	Aggregate off-balance sheet exposures ²		
Collateralized mortgage obligations		10	\$ 13,140	\$ —	\$ 12,098	\$ —		
Collateralized loan obligations		11	553	—	532	—		
Asset backed securities								
Residential mortgage loans		12	903	8,627	831	9,022		
Personal loans		13	12,149	547	10,565	1,071		
Credit card loans		14	17,560	—	14,785	—		
Automobile loans and leases		15	12,521	4,080	11,131	3,791		
Equipment loans and leases		16	1,600	168	1,374	71		
Trade receivables		17	787	918	865	1,275		
Total		18	\$ 59,213	\$ 14,340	\$ 52,181	\$ 15,230		

¹ On-balance sheet for capital purposes, in accordance with the Basel III regulatory framework.

² Off-balance sheet exposures are primarily comprised of liquidity facilities, credit enhancements, and letters of credit provided to the Bank's sponsored trusts, as well as Bank-funded cash collateral accounts.

Securitization and Resecuritization Exposures in the Banking Book¹

(\$ millions) As at	LINE #	2018 Q3			2018 Q2			2018 Q1		
		Gross securitization exposures	Gross resecuritization exposures ²	Risk- weighted assets	Gross securitization exposures	Gross resecuritization exposures ²	Risk- weighted assets	Gross securitization exposures	Gross resecuritization exposures ²	Risk- weighted assets
Capital Approach and Risk Weighting										
Standardized Approach ³										
AA- and above	1	\$ 20,128	\$ —	\$ 4,026	\$ 17,668	\$ —	\$ 3,534	\$ 14,907	\$ —	\$ 2,981
A+ to A-	2	—	—	—	—	—	—	—	—	—
BBB+ to BBB-	3	—	—	—	—	—	—	—	—	—
BB+ to BB-	4	—	—	—	—	—	—	—	—	—
Below BB-/Unrated	5	—	—	—	—	—	—	—	—	—
Ratings Based Approach ⁴										
AA- and above	6	40,177	—	2,851	36,737	—	2,607	34,517	—	2,452
A+ to A-	7	337	—	66	293	—	58	313	—	62
BBB+ to BBB-	8	841	5	819	837	6	822	908	6	889
BB+ to BB-	9	124	2	472	126	2	476	128	2	487
Below BB-/Unrated	10	386	—	3,703	498	—	4,945	594	—	5,952
Internal Assessment Approach ⁵										
AA- and above	11	19,907	—	1,191	19,025	—	1,088	19,925	—	1,109
A+ to A-	12	657	—	95	831	—	115	845	—	113
BBB+ to BBB-	13	—	—	—	—	—	—	—	—	—
BB+ to BB-	14	—	—	—	—	—	—	—	—	—
Below BB-/Unrated	15	—	—	—	—	—	—	—	—	—
Gains on sale recorded upon securitization	16	—	—	n/a	—	—	n/a	—	—	n/a
Total	17	\$ 82,557	\$ 7	\$ 13,223	\$ 76,015	\$ 8	\$ 13,645	\$ 72,137	\$ 8	\$ 14,045

		2017 Q4			2017 Q3		
		Gross securitization exposures	Gross resecuritization exposures ²	Risk- weighted assets	Gross securitization exposures	Gross resecuritization exposures ²	Risk- weighted assets
Capital Approach and Risk Weighting							
Standardized Approach³							
AA- and above	18	\$ 14,706	\$ —	\$ 2,941	\$ 13,481	\$ —	\$ 2,696
A+ to A-	19	—	—	—	—	—	—
BBB+ to BBB-	20	—	—	—	—	—	—
BB+ to BB-	21	—	—	—	—	—	—
Below BB-/Unrated	22	—	—	—	—	—	—
Ratings Based Approach⁴							
AA- and above	23	35,184	—	2,500	30,055	—	2,138
A+ to A-	24	525	—	88	471	—	77
BBB+ to BBB-	25	839	6	822	824	6	812
BB+ to BB-	26	80	2	277	78	2	265
Below BB-/Unrated	27	650	—	6,551	658	—	6,722
Internal Assessment Approach⁵							
AA- and above	28	20,698	—	1,147	20,830	—	1,118
A+ to A-	29	863	—	116	1,006	—	134
BBB+ to BBB-	30	—	—	—	—	—	—
BB+ to BB-	31	—	—	—	—	—	—
Below BB-/Unrated	32	—	—	—	—	—	—
Gains on sale recorded upon securitization	33	—	—	n/a	—	—	n/a
Total	34	\$ 73,545	\$ 8	\$ 14,442	\$ 67,403	\$ 8	\$ 13,962

¹ Securitization exposures include the Bank's exposures as originator and investor under both the IRB and the Standardized approaches.

² None of the Bank's resecuritization exposures were subject to credit risk mitigation.

³ Securitization exposures subject to the Standardized approach are primarily comprised of investments held in the Banking book.

⁴ Securitization exposures subject to the Ratings Based approach primarily include liquidity facilities, credit enhancements, letters of credit, and investments held in the Banking book.

⁵ Securitization exposures subject to the Internal Assessment approach are primarily comprised of liquidity facilities provided to the Bank's asset-backed commercial paper (ABCP) conduits.

Third-Party Originated Assets Securitized by Bank Sponsored Conduits

(\$ millions) As at		LINE #	2018 Q3				2018 Q2			
			Outstanding exposures		Gross assets past due, but not impaired ^{1,2}		Outstanding exposures		Gross assets past due, but not impaired ^{1,2}	
Exposure Type			Beginning balance	Activity	Ending balance		Beginning balance	Activity	Ending balance	
Residential mortgage loans	1		\$ 7,906	\$ (1,723)	\$ 6,183	\$ 25	\$ 8,125	\$ (219)	\$ 7,906	\$ 24
Automobile loans and leases	2		3,765	589	4,354	19	4,061	(296)	3,765	18
Equipment leases	3		369	67	436	4	291	78	369	—
Trade receivables	4		102	41	143	162	102	—	102	117
Total	5		\$ 12,142	\$ (1,026)	\$ 11,116	\$ 210	\$ 12,579	\$ (437)	\$ 12,142	\$ 159
			2018 Q1				2017 Q4			
			Outstanding exposures		Gross assets past due, but not impaired ^{1,2}		Outstanding exposures		Gross assets past due, but not impaired ^{1,2}	
Exposure Type			Beginning balance	Activity	Ending balance		Beginning balance	Activity	Ending balance	
Residential mortgage loans	6		\$ 8,294	\$ (169)	\$ 8,125	\$ 25	\$ 8,689	\$ (395)	\$ 8,294	\$ 22
Automobile loans and leases	7		3,306	755	4,061	22	3,043	263	3,306	20
Equipment leases	8		168	123	291	—	71	97	168	—
Trade receivables	9		1,465	(1,363)	102	138	2,346	(881)	1,465	164
Total	10		\$ 13,233	\$ (654)	\$ 12,579	\$ 185	\$ 14,149	\$ (916)	\$ 13,233	\$ 206
			2017 Q3							
			Outstanding exposures		Gross assets past due, but not impaired ^{1,2}					
Exposure Type			Beginning balance	Activity	Ending balance					
Residential mortgage loans	11		\$ 9,380	\$ (691)	\$ 8,689	\$ 25				
Automobile loans and leases	12		3,261	(218)	3,043	17				
Equipment leases	13		49	22	71	—				
Trade receivables	14		2,132	214	2,346	178				
Total	15		\$ 14,822	\$ (673)	\$ 14,149	\$ 220				

¹ Gross assets past due, but not impaired, are those assets held by the trust which have not received a payment in a specified number of days, as defined in the legal agreements governing each specific transaction between the Bank and its service providers. None of the Bank's sponsored trusts held impaired assets at any time during the period disclosed. The Bank retains no direct exposure to the assets of the trust. In addition, a significant portion of the Bank's exposures are subject to credit risk mitigation, including credit enhancements which reduce the Bank's exposure to loss due to impaired assets held by the sponsored trusts.

² Gross assets past due, but not impaired, are reported to the Bank by its service providers on a one-month lag.

Glossary – Basel

Risk-weighted assets (RWA)	<ul style="list-style-type: none"> Used in the calculation of risk-based capital ratios, total risk-weighted assets are calculated for credit, operational and market risks using the approaches described below. There are three different measures of RWA used for each capital ratio due to the different scalars used for the phase-in of the CVA. For fiscal 2017, the scalars inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 72%, 77%, and 81%, respectively. For fiscal 2018, the corresponding scalars are 80%, 83%, and 86%, respectively.
Approaches used by the Bank to calculate RWA	
For Credit Risk	
Standardized Approach	<ul style="list-style-type: none"> Under this approach, banks apply a standardized set of risk-weights to exposures, as prescribed by the regulator, to calculate credit risk capital requirements. Standardized risk-weights are based on external credit assessments, where available, and other risk-related factors, including exposure asset class, and collateral.
Advanced Internal Ratings Based (AIRB) Approach	<ul style="list-style-type: none"> Under this approach, banks use their own internal historical experience of PD, LGD, EAD, and other key risk assumptions to calculate credit risk capital requirements. Use of the AIRB approach is subject to supervisory approval.
For Operational Risk	
Advanced Measurement Approach (AMA)	<ul style="list-style-type: none"> Under this approach, banks use their own internal operational risk measurement system with quantitative and qualitative criteria to calculate operational risk capital.
The Standardized Approach (TSA)	<ul style="list-style-type: none"> Under this approach, banks apply prescribed factors to a three-year average of annual gross income for each of eight different business lines representing the different activities of the institution (such as, Corporate Finance, Retail Banking, Asset Management).
For Market Risk	
Standardized Approach	<ul style="list-style-type: none"> Under this approach, banks use standardized capital charges prescribed by the regulator to calculate general and specific risk components of market risk.
Internal Models Approach	<ul style="list-style-type: none"> Under this approach, banks use their own internal risk management models to calculate specific risk and general market risk charges.
Credit Risk Terminology	
Gross credit risk exposure	<ul style="list-style-type: none"> The total amount the Bank is exposed to at the time of default measured before counterparty-specific provisions or write-offs. Includes exposures under both the Standardized and AIRB approaches to credit risk.
Counterparty Type / Exposure Classes:	
Retail	
Residential Secured	<ul style="list-style-type: none"> Includes residential mortgages and home equity lines of credit extended to individuals.
Qualifying Revolving Retail (QRR)	<ul style="list-style-type: none"> Includes credit cards, unsecured lines of credit and overdraft protection products extended to individuals (in the case of the Standardized approach to credit risk, credit card exposures are included in the "Other Retail" category).
Other Retail	<ul style="list-style-type: none"> Includes all other loans (such as, personal loans, student lines of credit and small business loans) extended to individuals and small businesses.
Non-retail	
Corporate	<ul style="list-style-type: none"> Includes exposures to corporations, partnerships or proprietorships.
Sovereign	<ul style="list-style-type: none"> Includes exposures to central governments, central banks, multilateral development banks and certain public sector entities.
Bank	<ul style="list-style-type: none"> Includes exposures to deposit-taking institutions, securities firms and certain public sector entities.
Equities	<ul style="list-style-type: none"> Equities exposures in the banking book comprise mainly of exposures held with the objective of earning profits or to meet regulatory requirements in the United States (including Federal Reserve Bank and Federal Home Loan Bank equities). A small portfolio is held for strategic and other reasons.
Exposure Types:	
Drawn	<ul style="list-style-type: none"> The amount of funds advanced to a borrower.
Undrawn (commitment)	<ul style="list-style-type: none"> The difference between the authorized and drawn amounts (for instance, the unused portion of a line of credit / committed credit facility).
Repo-style transactions	<ul style="list-style-type: none"> Repurchase and reverse repurchase agreements, securities borrowing and lending.
OTC derivatives	<ul style="list-style-type: none"> Privately negotiated derivative contracts.
Other off-balance sheet	<ul style="list-style-type: none"> All off-balance sheet arrangements other than derivatives and undrawn commitments (such as letters of credit, letters of guarantee).
AIRB Credit Risk Parameters:	
Probability of Default (PD)	<ul style="list-style-type: none"> The likelihood that the borrower will not be able to meet its scheduled repayments within a one year time horizon.
Exposure at Default (EAD)	<ul style="list-style-type: none"> The total amount the Bank is exposed to at the time of default.
Loss Given Default (LGD)	<ul style="list-style-type: none"> The amount of the loss when a borrower defaults on a loan, which is expressed as a percentage of EAD.
Credit Valuation Adjustment (CVA)	<ul style="list-style-type: none"> CVA represents a capital charge that measures credit risk due to default of derivative counterparties. This charge requires banks to capitalize for the potential changes in counterparty credit spread for the derivative portfolios. As per OSFI's final Capital Adequacy Requirements (CAR) guideline, the CVA capital charge has been implemented for 2014 and will be fully phased in by 2019.
Common Equity Tier 1 (CET1)	<ul style="list-style-type: none"> This is a primary Basel III capital measure comprised mainly of common equity, retained earnings and accumulated other comprehensive income (loss). Regulatory deductions made to arrive at the CET1 Capital include, goodwill and intangibles, unconsolidated investments in banking, financial, and insurance entities, deferred tax assets, defined benefit pension fund assets and shortfalls in allowances.
CET1 Ratio	<ul style="list-style-type: none"> CET1 ratio represents the predominant measure of capital adequacy under Basel III and equals CET1 Capital divided by CET1 Capital RWA.
Return on Common Equity Tier 1 (CET1) Capital risk-weighted assets	<ul style="list-style-type: none"> Net income available to common shareholders as a percentage of average CET1 Capital RWA.
Liquidity Coverage Ratio (LCR)	<ul style="list-style-type: none"> LCR is calculated by dividing the total stock of unencumbered high quality liquid assets by the expected next 30 day stressed cash outflow.
Countercyclical Capital Buffer (CCB)	<ul style="list-style-type: none"> CCB is an extension of the capital conservation buffer which takes into account the macro-financial environment in which the banks operate and aims to protect the banking sector against future potential losses during periods of excess aggregate credit growth from a build-up of system-wide risk. The Bank's CCB will be a weighted average of the buffers deployed across jurisdictions to which the institution has private sector credit exposures.

Acronyms

Acronym	Definition	Acronym	Definition
ABCP	Asset-Backed Commercial Paper	HELOC	Home Equity Line of Credit
AOCI	Accumulated Other Comprehensive Income	IFRS	International Financial Reporting Standards
BCBS	Basel Committee on Banking Supervision	IRB	Internal Ratings Based
BRR	Borrower Risk Rating	MBS	Mortgage-Backed Security
CCP	Central Counterparty	N/A	Not Applicable
CCR	Counterparty Credit Risk	NHA	National Housing Act
CDS	Credit Default Swaps	OCC	Office of the Comptroller of the Currency
CMHC	Canada Mortgage and Housing Corporation	OCI	Other Comprehensive Income
D-SIBs	Domestic Systemically Important Banks	OSFI	Office of the Superintendent of Financial Institutions Canada
FVOCI	Fair Value Through Other Comprehensive Income	PFE	Potential Future Exposure
G-SIBs	Global Systemically Important Banks	QCCP	Qualifying Central Counterparty